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Investigates in Good Marketing.

# McCULLOUGH'S

Catalogue of

Bulbs, Seeds, Autumn 1-9-1-9

Shrubs, Fruit Trees, Etc.



CULTURAL



# The J. M. McCullough's Sons Co.

H. B. McCULLOUGH.

Long Distance Phone Main 4598

Cincinnati, O.



# INSTRUCTIONS

# Always Get Your Bulbs Early



Established Wo

Established 1838

IT IS advisable to get your bulbs in the ground as early as possible after the first of October. Sooner will do no harm in cold localities. Although they can be planted as late as they can be got in the ground, yet those planted early give finer flowers, as it is necessary for bulbs to make some root growth in Fall to give the best results. The general line of bulbs will be ready the second week in September. A few kinds (chiefly lilies) are not ready for shipment before November, as they are not matured enough to take up before that time. Therefore, please note that all general orders will be shipped as soon as received, and the "November Bulbs" will be forwarded as early in November as possible. Should you wish us to hold your general order until November bulbs are ready, please so state.

OUR PRICES INCLUDE POSTAGE on single bulbs and by the dozen, except where otherwise noted. Bulbs quoted by the hundred are not sent prepaid.

Order Early. It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received.

Send the Money with the Order. Remit by Post Office Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D. Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so that we can forward our Catalogues with regularity; if you receive two catalogues of the same kind, please hand one to some friend who is interested in floriculture.

Should an Error Occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your name and address distinctly and in full; please use the order sheet and envelope inserted in this catalogue.

Our Spring Catalogue of Seeds, Bulbs, etc. for 1920 will be ready about January 1st, and will be sent free to all customers and applicants.

# PREMIUMS AND OFFERS TO CLUBS

To induce our patrons to form clubs to purchase bulbs in quantities we offer the following liberal discounts on bulbs selected from our general lists:

On	\$1.00	order	$\mathbf{may}$	select	burbs	to	tne	amount	01\$1.10
"	2.00	"	"	"	"	"	"	"	" 2.25
"	3.00	"	"	"	"	"	"	"	" 3.45
"	4.00	"	"	"	"	"	"	"	" 4.60
"	5.00	"	"	"	"	"	"	"	" 5.75
"	6.00	"	"	"	"	"	"	"	" 6.90
44	7.00	"	"	"	"	"	"	"	" 8.05
46	8.00	"	"	"	"	"	"	"	" 9.20
"	9.00	"	"	"	"	"	"	"	"10.35
"	10.00	"	"	"	"	"	"	"	"11.50

## PARCEL POST RATES

All parcels of seeds, bulbs and plants, up to and including 8 oz. at the rate of 1c for each 2 oz. regardless of distance; over 8 oz., at the Zone Rate. All merchandise other than seeds, bulbs and plants up to and including 4 oz. in weight can be sent at the rate of 1c an ounce regardless of distance. Over 4 oz. at the Zone Rate.

NOTE:—When estimating postage on goods not included in our free delivery, bear in mind that while the packing on one pound may only weigh the fraction of a pound, it must be considered as a full pound when adding postage. On larger quantities add postage in proportion.

Limit of weight for delivery within local, first, second and third zones is 70 pounds; to all other zones, 50 pounds.

When larger quantities are wanted we can pack in two or more parcels if necessary, provided money is remitted to cover postage.

Zone	First Pound	Additional Pound
1 and 2—150 miles	5c	1c
3—150 to 300 miles	6с	2c
4—300 to 600 miles	7c	4c
5—600 to 1,000 miles	8c	6c
6—1,000 to 1,400 miles	9с	8c
7—1,400 to 1,800 miles	<b>11</b> c	10c
8—all over 1,800 miles	<b>12</b> c	<b>12</b> c

Poisons cannot be sent by mail. Liquids and goods packed in glass should be sent by Express.

The J. M. McCullough's Sons Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.



# THE J. M. McCULLOUGH'S SONS CO.

H. B. McCULLOUGH, Pres't.

GEO. H. PARVIN. Vice-Pres's

Seedsmen and Importers of BULBS

Salesrooms and Offices:

316

WALNUT STREET
Just Below Fourth 316

Long Distance Phone Main 4598

P. O. Box 845 Cincinnati, Ohio



-- ORDER SHEET=

THE J. M. McCULLOUGH'S SONS CO., Cincinnati, O.

#### -ORDER SHEET

# THE J. M. McCULLOUGH'S SONS CO., Cincinnati, O. 316 Walnut Street. Between Third and Fourth Streets

	510 Wallitt Street, between Tillit and FC	Juliu Su	CCL	•				
VERY	IMPORTANT— Write your Name and Address Distinctly and in Full.	( Damittan	Do	ite	la by D		191	
Name	of Person	Order, Pe	estage Expre	Stamps, D	rafts on N	New York	r, Express Money k or Cincinnati, or	)
**	Post Office	Enclosed	find	l Cash			\$	•
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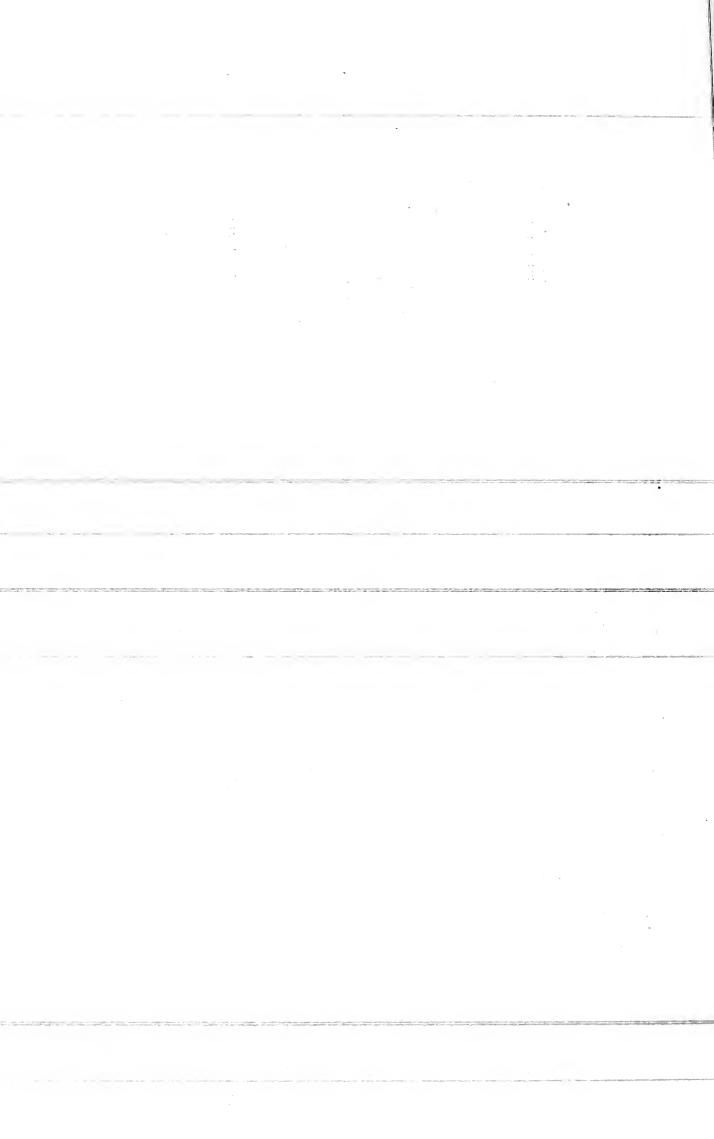
Please use this Order Sheet for orders only, and carry out Catalogue Price of each article. Write your letters on a separate sheet. By observing these directions, it will help us to fill your order with greater accuracy.

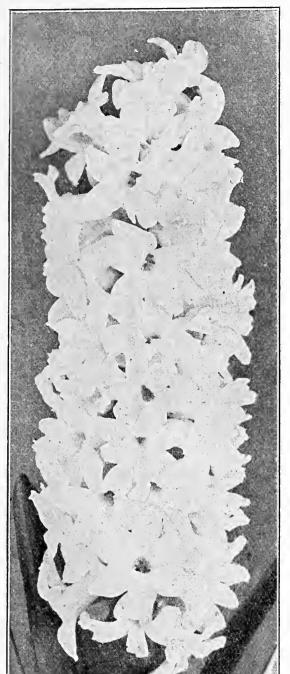
More order blanks will be sent on request. Always write letters on a separate sheet from your order.

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on

these terms, they are at once to be returned. THE J. M. McCULLOUGH'S SONS CO.

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# Investigator in Seed Marketing. Dutch Flyacinths

HF Hyacinth is so well known and esteemed that any description of its many good qualities is needless. The list now offered includes nearly every shade of red, white, blue, yellow, etc.

# Culture of the Hyacinth

FOR PLANTING HYACINTHS IN OPEN GROUND, the preferable season is September to November, but they can be set out at any later time as long as the ground is open. The best compost for their culture is onethird sand, one-third well-rotted cow manure, and one-third good garden mould; or, where the soil is naturally light, well-rotted cow manure liberally intermixed is all sufficient. The beds composed of the above compost should be well dug to a depth of fourteen inches, and raised from two to four inches above the level of the walk. The bulbs should be planted about six inches deep, and from five to six inches apart. Care must be taken not to press the earth too firmly around and over the bulbs. After planting, rake the bed or border smooth, and after the ground has frozen tolerably hard in early Winter, cover with a few inches of dry litter, leaves, evergreen boughs or coarse manure.

FOR THE CULTURE OF HYACINTHS IN POTS, prepare the above compost, adding, if possible, a quantity of leaf mould. The most favorable time for planting is September, October and November; for a succession of bloom, use a four or five-inch pot for a single bulb, and seven-inch for three bulbs. Set the bulbs down in the soil and cover them; do not press them in by force, for this packs the soil under them, and when the roots start they are apt to lift the bulb. After planting, water and set away in a dark place until the pots are well filled with roots. Keep the earth moist, and bring Being exposed to the light for the first to the light as wanted to bloom. time, they are, of course, very delicate, care should, therefore, be exercised not to place them in the direct rays of the sun for two or three days.

FOR CULTURE IN GLASSES, the bulbs should be so placed that only the base touches the water; then place them, for the first ten days, in only the base touches the water, then place them, for the first ten days, in a dark but cool closet or room, to promote the starting of the roots, after which expose them to the light and air as much as possible; avoid placing them near gas-light. The water should be changed as it becomes impure; draw the roots entirely out of the glasses, rinse off the fibers in clean water and wash the inside of the glass well. The water should never be allowed to freeze. When the flowers are well advanced give them. When the flowers are well advanced, give them a shower of water to freeze. every day.

# Choice Named Single Hyacinths (Extra Selected, First-Size)

IT is supposed by many that the best Hyacinths are those which produce double flowers. This is by no means correct, there being many more of the single varieties producing fine, free and brilliant spikes of bloom, and they succeed better in glasses than the double.

PRICES PER DOZEN AND SINGLE BULB INCLUDE POSTAGE

We offer the following named varieties at the uniform price of each 20c, per dozen \$2.00, per 100 \$15.00.

### Single Red, Rose and Pink

ETNA, brilliant pink, large spike and flower, late flowering. GARIBALDI, brilliant carmine, very 'early. GENERAL DE WET, light pink, large spike, good flower. GENERAL PELISSIER, deep crimson, fine truss, early. GERTRUDE, deep rose, fine compact spike. GIGANTEA, delicate pink, large bells.

LADY DERBY, bright rose, large spike and flower, excellent for forcing or pot culture, large bulb.

LA VICTOIRE, brilliant dark pink, very large spike; one of the best.

of the best.

MARIE CATHERINA, deep red, large spike.

MORENO, waxy pink; large truss and bells, extra fine

variety.

QUEEN OF THE PINKS, brilliant pink; large flower and spike; a great acquisition—One of the best.

ROBT. STEIGER, bright crimson, a fine compact spike.

ROIDES BELGES, bright scarlet, fine truss.

ROSEA MAXIMA, delicate rose, fine truss.

ROSINE, salmon pink, large bells, extra fine for forcing or bedding.

## Single Pure and Tinted White

ALBERTINE, pure white, early, good forcing variety.
ARENTINE ARENDSEN, pure white, large spike and flowers, very early; splendid for forcing.
BLANCHEUR, pure white, large broad truss.
GENERAL VETTER, blush white, very large spike, splendid early forcer.
GRANDE BLANCHE, blush white, large spike and flowers, GRANDEUR A MERVEILLE, rosy-white, large truss.

# Single Pure and Tinted White (Cont'd)

LA FRANCHISE, rose white, large bells, good truss.

LA GRANDESSE, pure white, with immense bells, one of the best in cultivation.

L'INNOCENCE, pure white, extra large truss.

MIMI, pure white, large spike and truss, splendid bedder and good forcer.

# Single Blue, Lavender and Purple

BARON VON THUYLL, dark blue, compact spike.
CAPTAIN BOYTON, bright lavender blue, with silvery shading; handsome long spike.
ENCHANTRESS, delicate porcelain blue, large compact

GRAND LILAS, silvery lilac, large compact truss.
GRAND MAITRE, deep porcelain blue, large truss.
KING OF THE BLUES, dark rich blue, splendid spike.
LA PEYROUSE, light blue, large bells.
MARIE, dark purple, very large spike.
PERLE BRILLIANTE, light blue, large spike and flowers;

late flowering.

QUEEN OF THE BLUES, beautiful azure blue, large bells and handsome truss, late.

#### Single Yellow

BUFF BEAUTY, orange turning to lemon yellow, large flower and spike, very early, good for pots or glasses.

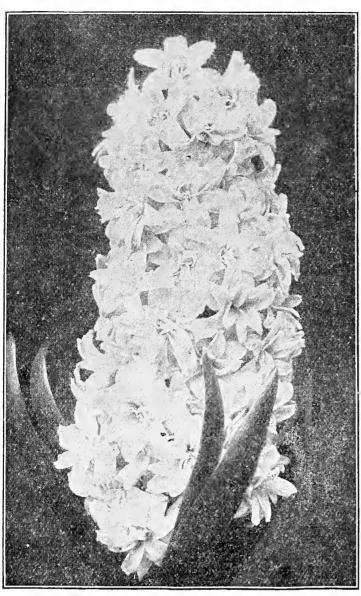
KING OF YELLOWS, pure yellow, large bell and spike.

YELLOW HAMMER, golden vellow, fine large spike; one of the best.

The above named Hyacinths, each 20c; per doz. \$2.00; per 100 \$15.00.

Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen,

# Select First-Size Named Double Hyacinths



WHILE double-flowering Hyacinths do not, as a rule, produce as fine spikes as the single sorts offered on page 1, yet they are exceedingly handsome, and deserve extensive cultivation. The varieties listed below are those which we have found by actual tests to be the most satisfactory. factory.

We offer the following named varieties at the uniform price of..... Each, 20c; per dozen, \$2.00; per 100, \$15.00.

### Double Red and Rose

BOUQUET TENDRE, dark carmine, good spike. CHESTNUT FLOWER, bright rose, large flower. GROOTVORST, pink, large truss and bells. NOBLE PAR MERITE, rose, large bells, splendid truss. PRESIDENT ROOSEVELT, bright rose, fine spike. PRINCE OF ORANGE, blush rose, fine spike, semi-double.

### Double White

BOUQUET ROYAL, pure white, fine spike. LA VIRGINITE, blush white, dwarf, large bells. PRINCE OF WATERLOO, pure white, large spike. QUEEN OF WHITES, pure white, large truss, fine flower.

### Double Blue

BLOKSBERG, porcelain striped, large truss. **DELICATA**, light blue, handsome bells and spike. **GARRICK**, lilac blue, with bright blue stripe. GENERAL KOHLER, bright blue, large spike. LORD RAGLAN, azure blue, deep blue center.

#### Double Yellow

GOETHE, clear, pale yellow, large bells, fine truss. LOUIS D'OR, bright yellow, red center, large bells. SIR ROWLAND HILL, pure yellow. SUNFLOWER, yellow, tinted salmon.
WILLIAM III, yellow, with red center, compact spike.
The above named Hyacinths, Each, 20c; per dozen, \$2.00; per 100, \$15.00.

Price Per Dozen and Single Bulb Includes Postage.

# Select Second-Size Named Single Hyacinths

ESE are smaller than our Extra Selected first-size bulbs offered on Page 1, but are fine flowering stock, and admirably adapted for pot culture and high-grade bedding where distinct shades of color are desired.

We can furnish them in the following selected varieties at the uniform price of each 15c; per doz. \$1.50; per 100 \$10.00.

# Single Red, Rose and Pink

CARDINAL WISEMAN, charming bright rose pink, large spike. GENERAL PELISSIER, deep crimson, fine truss, early. GERTRUDE, deep rose, fine compact spike. GIGANTEA, delicate pink, large bells.
MORENO, waxy pink; large truss and bells, extra fine variety. ROBT. STEIGER, bright crimson, a fine compact spike. ROI DES BELGES, bright scarlet, fine truss. ROSINE, salmon pink, large bells, extra fine for forcing or bedding.

# Single Pure and Tinted White

ALBERTINE, pure white, early, good forcing variety.
GRANDE BLANCHE, blush white, large spike and flowers, early.
GRANDEUR A MERVEILLE, rosy-white, large truss.
LA FRANCHISE, rose white, large bells, good truss.
LA GRANDESSE, pure white, with immense bells; one of the best in cultivation. in cultivation.

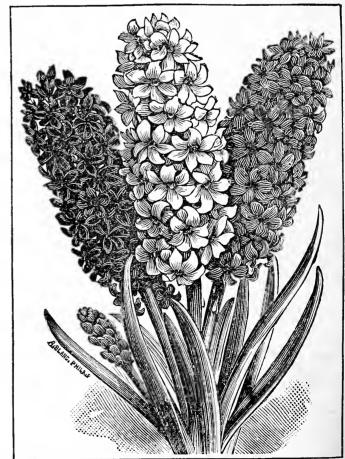
L'INNOCENCE, pure white, extra large truss.

PAIX DE L'EUROPE, pure white, late, good bedder.

# Single Blue, Lavender and Purple

GRAND MAITRE, deep porcelain blue, large truss.
KING OF THE BLUES, dark, rich blue, splendid spike.
LA PEYROUSE, light blue, large bells.
MARIE, dark purple, very large spike.
QUEEN OF THE BLUES, beautiful azure blue, large bells and bandsome truss; late. handsome truss; late.
REGULUS, light blue, good forcer and bedder.

The above named Hyacinths, each 15c; per doz. \$1.50; per 100, \$10.00.



Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

# CHOICE UN-NAMED HYACINTHS

# For Bedding and Forcing, in Separate Colors and Mixed Shades

These are made up of varieties selected for beds and borders, or for forcing for cut flowers, and are of such superior quality as to be entirely satisfactory to florists who use large quantities of them.

Prices per Dozen and Single Bulb Include Postage.

We offer the following un-named varieties at the uniform price of.... Each, 8c; per doz., 75c; per 100, \$5.25

# Single Varieties

Single Red, mixed shades.

Rose. Pure White.

White, tinted. Dark Blue and Purple.

Light Blue.

SINGLE MIXED, all colors.

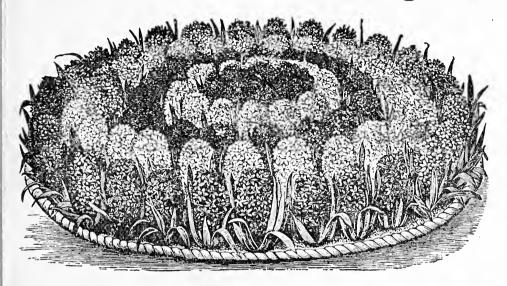
# Double Varieties

Double Red, mixed shades.

Rose.
Pure White.
White, tinted.
Dark Blue and Purple.
Light Blue.

"Yellow.
DOUBLE MIXED, all colors.

# Round Bed of Named Single Hyacinths, Second-Size



THIS illustration represents a bed 15 feet in circumference, or 5 feet across, composed of 5 circular rows, requiring a total of 100 bulbs, planted 6 inches apart, as follows:

Combination No. 1. Center row contains 9 Red Hyacinths; second row contains 14 White Hyacinths; third row contains 20 Blue Hyacinths; fourth row contains 25 Pink Hyacinths; fifth row contains 32 Dark Blue Hyacinths

Price \$10.00, not prepaid.

Combination No. 2. Consists of 100 Un-named Hyacinths, mixed shades that will produce a charming effect.

Price \$5.25; not prepaid.

# SOUARE BED OF Single Hyacinths

This illustration represents a bed 6 feet square, requiring a total of 169 bulbs planted 6 inches apart.

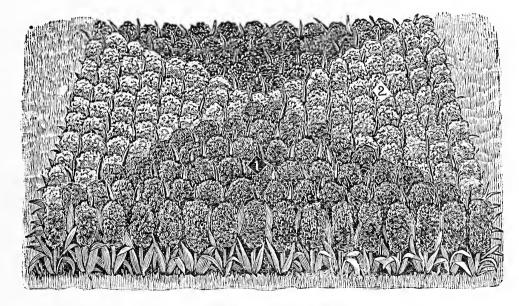
PINK AND BLUE COMBINATION requires 85 Pink and 84 Blue Hyacinths.

CRIMSON AND WHITE COMBINATION requires 85 Crimson and 84 White Hyacinths.

Price for either Combination—Our Select Second Size, Named Hyacinths, \$15.00, not prepaid.

### "Suburban Combination"

consists of 169 Choice Un-named Hyacinths, mixed shades. Price \$8.00, not prepaid.



# HYACINTHS--Miniature or Dutch Roman

These may be planted close together in pots or boxes, also in beds in the open ground with charming effect. We can furnish them in the following colors: Dark Red, Rose and Pink, Dark Blue, Light Blue, Pure White, All Colors Mixed. Each, 6c; per doz. 60c; per 100 \$3.75.

# McCULLOUGH'S COLLECTIONS OF NAMED HYACINTHS

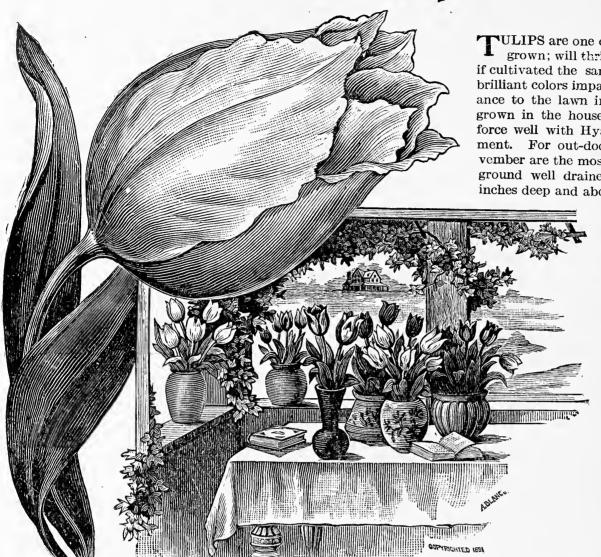
Special Selection for Growing in Water.

This selection is made up of sorts which are especially adapted for the purpose. For cultural notes see page 1. Special Selection for Growing in Pots.

A selection of distinct sorts best adapted for the purpose. For cultural notes see page 1. 12 distinct named single varieties; our selection.....\$2.00 | 12 distinct named double varieties, our selection.....\$2.00

Persons purchasing Hyacinths at our counters, or who wish to pay their own express charges may deduct 10c per dozen from these prices when bought by the dozen.

# Gulips



TULIPS are one of the most ornamental flowers grown; will thrive in any rich soil or situation, if cultivated the same as the Hyacinth. Their brilliant colors impart a rich and beautiful appearance to the lawn in early Spring. They can be grown in the house in pots or baskets, and will force well with Hyacinths under the same treatment. For out-door planting, October and November are the most favorable months. Have the ground well drained; plant from three to four inches deep and about six inches apart.

The letters, a, b, c, following the varieties, indicate their earliness of bloom, the A's flower together, and are the earliest; B next, etc. The figures indicate the height attained in inches, to aid in arranging flower beds.

#### Prices per Dozen and Single Bulb Include Postage

Persons purchasing Tulips at our counters, or who wish to pay their own express charges, may deduct 5c per dozen when bought by the dozen. Prices per 100 are not prepaid.

# SINGLE EARLY TULIPS.

	Each 1	Per Doz.	Per 100
ARTUS, b7, scarlet, fine bold flowers, good for forcing or bedding	\$0.04	\$0.40	\$2.75
BELLE ALLIANCE, b7, brilliant scarlet, large flower, sweet scented; fine for bedding and forcing	.06	.55	3.75
BIZARD VERDIKT, brilliant carmine, striped yellow	.05	.45	3.00
CHRYSOLORA, b9, pure yellow, large and handsome flower; finest yellow bedder	.06	.55	3.75
COTTAGE MAID, b6, rosy pink, edged with white; a charming variety for bedding and late forcing	.06	.55	3.75
COULEUR PONCEAU, cherry and white	.05	.45	3.00
CRIMSON BRILLIANT, b9, brilliant scarlet, large flower; splendid variety for bedding and forcing	.06	.60	4.00
DUC DE BERLIN, a8, scarlet with broad yellow edge and yellow base; good for forcing	.06	.60	4.50
DUCHESSE DE PARMA, b9, brownish red with yellow border, large flower; good forcer and bedder	.06	.55	3.75
DUSART, b8, dark scarlet, large and very robust, fine for parks, a grand flower; finest scarlet bedder	.05	.45	3.00
GRAND DUC, (Keiserskroon), b9, deep crimson] with broad orange yellow margin, large and effective	.05	.50	3.50
JOOST VAN VONDEL, b8, crimson, flamed white, large and distinct	.05	.45	3.00
KING OF THE YELLOWS, b9, deep golden yellow; extra large and showy; good for early forcing	.06	.60	4.00
LA REINE. (Queen Victoria). b6, white, slightly shaded rose; good variety for bedding or forcing	.06	.60	4.00
L'IMMACULEE, b7, pure white, very early and fine; excellent for forcing and bedding	.05	.45	3.00
POTTEBAKER SCARLET, a8, bright scarlet, very large and fine flower	.05	.45	3.00
"WHITE, a8, pure white, fine large showy flower	.06	.60	4.00
"YELLOW, a8, large fine bright golden yellow; excellent forcer	.05	.50	3.50
PRINCESS MARIANNE, b8, white, with rosy stripe, large flower; excellent for bedding	.05	.45	3.00
PRINCE OF AUSTRIA, b9, orange scarlet, sweet scented; fine forcer or bedder, a grand Tulip	.06	.60	4.50
PROSERPINE, a8, carmine rose, rich, silky and effective, beautifully shaped large flower	.10	.90	6.50
QUEEN OF PINKS, deep pink and white, large pointed flowers on a tall, strong stem; an attractive			
bedder	.05	.45	3.00
QUEEN OF THE WHITES, pure white, with pointed petals on strong stem; good bedder	.05	.45	3.00
ROSE GRISDELIN, b6, delicate rose, shaded white; fine for forcing and bedding, very beautiful	.05	.50	3.50
ROSA MUNDI, b8, white, shaded with rich rose, very strong stem; early	.06	.55	3.75
THOMAS MOORE, b10, orange scarlet, effective large tulip, sweet scented	.05	.45	3.00
VERMILION BRILLIANT, b8, deep dazzling vermilion; extra fine for pots and massing		.75	5.50
WHITE SWAN, b9, large pure white, egg shaped flower on tall stems		.45	3.00
YELLOW PRINCE, b7, golden yellow, extra large and showy, scented as a Tea Rose		.55	3.75
CHOICEST MIXED, from above named varieties; extra fine		.40	2.75
FINE MIXED, including all colors and shades	.04	.40	2.50

# Late May Flowering Single Tulips

THIS beautiful class is becoming more popular as they become better known. They are distinct from the early flowering sorts, coming into bloom two or three weeks later, and extending the Tulip season over a period of four weeks or more. On account of their extreme hardiness, they are especially adapted for the permanent hardy flower border, where they should be liberally planted in clumps or masses. They may also be naturalized in grass, wild gardens, etc. For bedding they are superb, while as cut flowers they are much to be preferred to the early type, having long stems with flowers of great substance that stand out in a perfect condition for a long time.

In planting, the bulbs should be set a little deeper than ordinary tulips, a covering of 4 inches being about right.

BOUTON D'OR (Ida, Golden Beauty), (21 inches). Rich, deep golden yellow; a large, long stemmed, globular flower of finest substance: fine bedder and unequaled for cutting.

BOUTON D'OR (Ida, Golden Beauty), (21 inches). Rich, deep golden yellow; a large, long stemmed, globular flower of finest substance: fine bedder and unequaled for cutting.

Each, 4c; per dozen, 40c; per 100, \$2.75.

GESNERIANA SPATHULATA. (25 inches). Intense crimson scarlet, with glittering blue-black center. The tallest, largest flowered and showiest of all Tulips for bedding out in masses. Flowers of enormous size.

Each, 4c; per dozen, 40c; per 100, \$2.75.

GESNERIANA ROSEA. (24 inches). Very large flowers of a bright rose color, with blue center, remaining in perfection for a long time. Each, 5c; per dozen, 40c; per 100, \$2.75.

GESNERIANA ROSEA. (24 inches). Very large flowers of a bright rose color, with blue center, remaining in perfection for a long time. Each, 5c; per dozen, 40c; per 100, \$2.75.

GESNERIANA ROSEA. (24 inches). Large flowers with pointed petals, color rich yellow, petals faintly edged with red; a good bedder. sweet scented.

Each, 4c; per dozen, 40c; per 100, \$2.75.

ISABELLA (Blushing Bride, Ehandon Bells), (15 inches). Large, long, handsome flow Per 100 \$2.75 Per Doz. **\$0.40** shaped flowers.

LA MERVEILE (18 inches). A magnificent variety with very large, sweet scented flowers; color, salmon rose overlaid with orange-red, very effective in beds and borders.

PARISIAN YELLOW (28 inches). A beautiful, large, pure yellow of exquisite shade and shape; special value for cutting.

PICOTEE (Maiden's Blush), (24 inches). White, faintly edged with pink, which suffuses the entire flower as it ages; a beautiful cut flower.

SALMON QUEEN (Englescomb Pink) (18 inches). Bright rose pink with a salmon sheen, large globular flower. 45 3.00 05 .45 3.00 .05 .45 3.00 .04 .40 2.75 globular flower.

SWEET NANCY. A very large, egg-shaped flower, white edged and suffused with rose.....

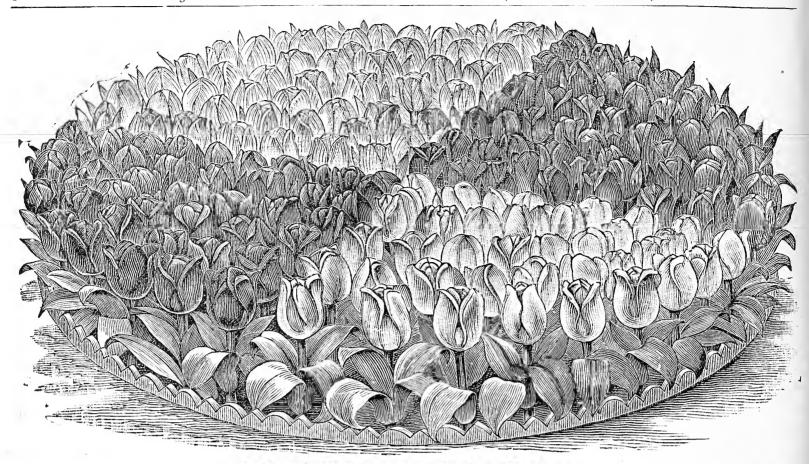
CHOICEST MIXED. A splendid mixture of all colors, including sweet scented varieties....

# DARWIN TULIPS (May-Flowering)



THE Darwin are late May-flowering garden Tulips, producing very large bowl-formed flowers of symmetrical shape, on tall, strong stems, 2 to 3 feet high, and are effective grown in groups, in the shrubbery or herbaceous border. They far surpass in color and brilliancy anything before known in Tulips. They include almost every con-

before known in Tulips. They include	ıde aln	nost eve	ry con-
ceivable color and shade.	ach P	er Doz.	Per 100
ASA GRAY. Dark carmine, large, finely formed flower			
finely formed flower	<b>\$0.05</b>	<b>\$0.45</b>	\$3.00
BARONNE DE LA TONNAGE (26			
inches). Bright, pink margined			
blush—base white, tinged blue.	0.0	= @	9 75
A long and beautiful flower  CLARA BUTT. A large flower of	.06	.55	<b>3.75</b>
remarkable beauty; color soft			
salmon pink, shaded rose	.05	.45	3.00
<b>DREAM.</b> Beautiful delicate lilac—	.00	. 10	0.00
<b>DREAM.</b> Beautiful delicate lilac—large globular flowers	.06	.60	4.50
FARNCOMBE SANDERS. Im-	•		
mense flower of the most brilliant			
scarlet, one of the best and showi-			
est	.06	.60	4.50
GLOW. Brilliant, glowing vermilion;	0.0		4.00
blue-black base, zoned white	.06	.60	4.00
<b>GRETCHEN.</b> (Margaret). A lovely large flower of globular form;			
outside soft blush; inside blush			
rose	.05	.50	3.50
MADAME KRELAGE. Soft lilac	.00		0.00
rose, with a broad margin of			
blush pink; large flower on a very			
tall stem; good for forcing	.06	.60	4.00
PAINTED LADY. Milk white,			
flushed heliotrope—a good bed-			
ding and forcing variety  PRIDE OF HAARLEM. Magnifi-	.05	.45	3.00
PRIDE OF HAARLEM. Magnin-			,
cently formed flower of immense size; color brilliant, deep			
salmon-rose, shaded with scarlet;			
electric blue base	.06	.60	4.00
THE SULTAN. Rich, glossy black	.00	.00	4,00
maroon; one of the best dark			
varieties	.05	.45	3.00
WHITE QUEEN. A large globular			,
flower of pure white, faintly	0.5	<b>7</b> .0	0 =0
flushed with delicate blush	.05	.50	3.50
FINEST MIXED. Great variety of	.04	.40	2.75
all colors and shades,	\$U,	OF.	4.13



Bed of Single or Early Tulips.

This illustration represents a bed eighteen feet in circumference or six feet across, requiring a total of 200 bulbs planted

five inches apart.

Yellow and Scarlet Combination—100 Yellow and 100 Scarlet Tulips.

White, Crimson, Yellow and Pink Combination—50 White, 50 Crimson, 50 Yellow and 50 Rose Tinted Tulips.

Price for either Combination, \$5.00 each; not prepaid.

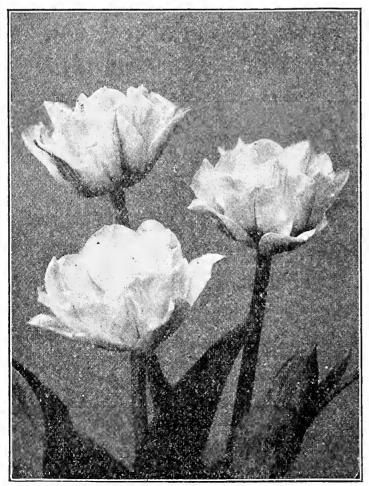
Price for either Combination and Varieties that will bloom together.

McCULLOUGH'S "PREMIER" combination of SINGLE TULIPS consists of 200 superfine mixed Single Tulips, embracing a wide range of beautiful colors. Price \$4.00; not prepaid.

# Double Tulips.

THIS class of Tulips is one of the most valuable. The earlier varieties are admirably adapted for pot cultures and form a pleasing contrast to the Single Tulips in the greenhouse or conservatory. When planted in the open border they are very showy, and a succession of bloom may be had by a judicious selection from the earlier and 'ater varieties. The Rex Rubrorum and La Candeur form a dense mass of bloom when grown in beds, and the flowers remain in perfection of bloom longer than those of the single varieties.

FOR CULTURAL DIRECTIONS, ETC., SEE TULIPS, PAGE 4.



BLANC BORDE POURPRE, violet, bordered white. Each, 4c; per dozen, 45c; per 100, \$3.00.

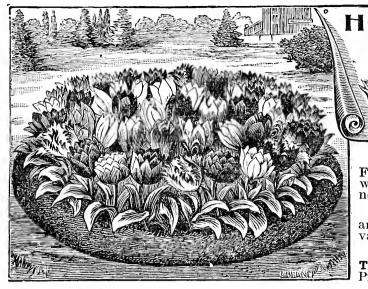
COURONNE D'OR, b8, golden yellow flushed orange, large handsome flower; excellent for growing in pots or beds.

Each, 8c; per dozen, 75c; per 100, \$5.50. COUSINE, dark violet with light border, splendid bedder. Each, 4c; per dozen, 45c; per 100, \$3.00. KE OF YORK, b8, dark rose, bordered white, showy and fine...Each, 4c; per dozen, 45c; per 100, \$3.00. GLORIA SOLIS, a7, deep crimson, with broad golden margin, very large. Each, 6c; per dozen, 55c; per 100, \$3.75. IMPERATOR RUBRORUM, a9, rich crimson scarlet, extra fine for forcing. Each, 8c; per doz., 75c; per 100, \$5.50. 3, pure white, extensively grown for bedding. Each, 5c; per dozen, 50c; per 100, \$3.50. LA CANDEUR, b8, MURILLO, b8, blush white, shaded rose, large flowers, fine for forcing and bedding. and bedding. Each, 7c; per dozen, 70c; per 100, \$5.00. REX RUBRORUM, b9, bright crimson scarlet, superb for bedding; large, showy.

Each, 4c; per dozen, 45c; per 100, \$3.00. ROSE BLANCHE, pure white, good bedding variety. Each, 4c; per dozen, 45c; per 100, \$3.00. RUBRA MAXIMA, a9, dark, crimson scarlet, splendid early forcer and good bedder.

Each, 7c; per dozen, 70c; per 100, \$5.00. SALVATOR ROSA, a8, deep rose flamed with blush; a fine large double flower, suitable for early forcing or bedding. Each, 7c; per dozen, 70c; per 100, \$5.00. TOURNESOL, a7, scarlet, margined yellow; one of the best for forcing. Each. 8c; per dozen, 75c; per 100, \$5.50. YELLOW ROSE, c9, large golden yellow, fine bedder and sweet scented.....Each, 5c; per dozen, 50c; per 100, \$3.50. CHOICEST MIXED, from named varieties, extra fine. Each, 5c; per dozen, 50c; per 100 \$3 50.

FINE MIXED, including all colors and shades. Each, 4c; per dozen, 45c; per 100, \$3.00.



# HOME GOLLECTIONS OF DOUBLE

Our "Home Collection No. 1" consists of fifty Double Flowering Tulips carefully selected from named varieties, and will produce handsome large double flowers. Price, \$1.75; not prepaid.

"Home Collection No. 2" consists of twenty-five double and twenty-five single flowering Tulips selected from named varieties. Price. \$1.60; not prepaid.

McCULLOUGH'S "NORWOOD" collection of DOUBLE TULIPS consists of 200 superfine, mixed Double Tulips. Price, \$6.00; not prepaid.

# **PARROT** OR DRAGON TULIPS

VERY large flowers of singular and picturesque forms and brilliant colors; very beautiful and interesting. The petals are curiously fringed or cut. They form showy flower beds or borders, are of endless variety of form and color, stand a long time when cut, and should be grown in every flower garden in countity. in quantity.

CONSTANTINOPLE, large red flowers, tipped orange. Each, 4c; per dozen, 40c; per 100, \$2.75.

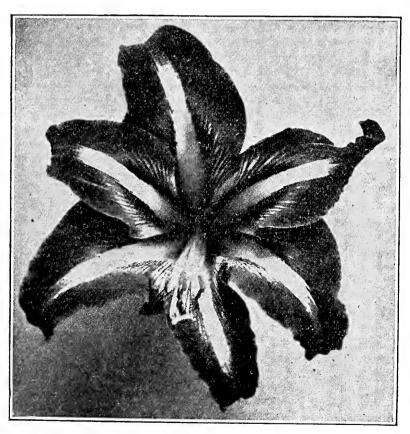
CRAMOISIE BRILLIANT, deep crimson, with large black star-shaped center, extra fine.

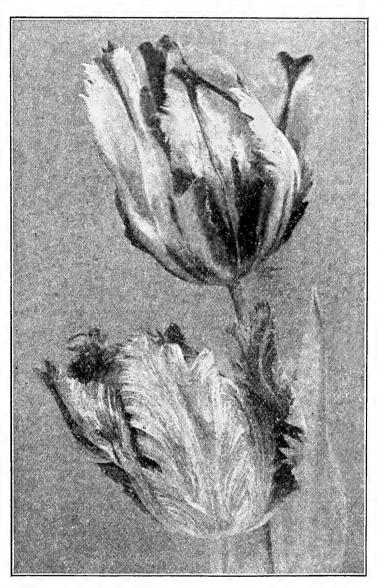
Each, 4c; per dozen, 40c; per 100, \$2.75.

LUTEA MAJOR, large bright yellow, feathered with red and green......Each, 4c; per dozen, 40c; per 100, \$2.75.

PERFECTA, striped yellow and scarlet. Each, 4c; per dozen, 40c; per 100, \$2.75.

FINEST MIXED COLORS. Each, 4c; per dozen, 40c; per 100, \$2.50.



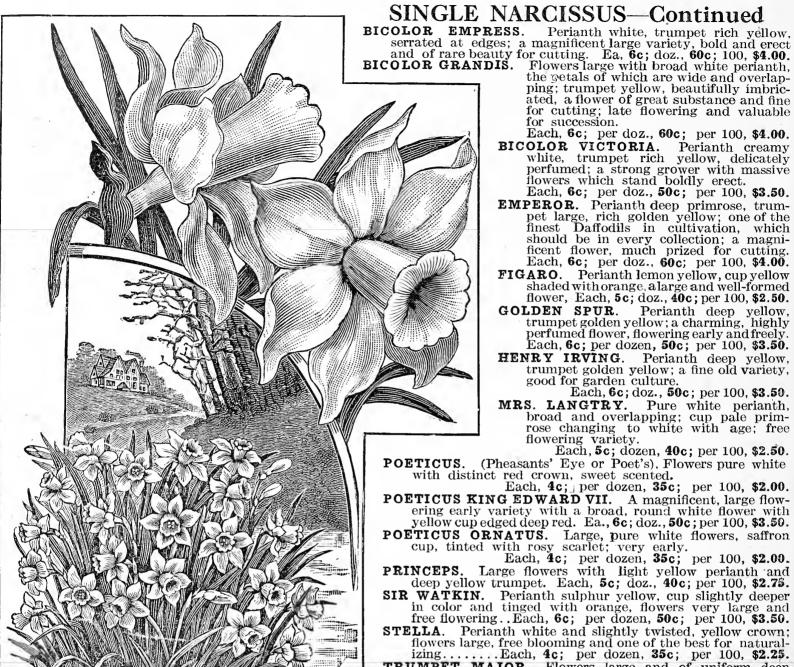


# Amaryllis

ALL varieties of the Amaryllis are ornamental. Plant in equal parts sandy loam and leaf-mould. If convenient, start them in a hot-bed, beginning with fifty degrees of heat, increasing to sixty or seventy; when the leaves appear water carefully, but in not too great a quantity.

When through blooming, water should be gradually withheld until the tops are dry; then store away in a cool place safe from frost until season arrives for starting them again.

	$\mathbf{Each}$	Per Doz.
Belladona Major, trumpet-shaped, dark rose and white	. \$0.25	\$2.50
Formosissima, velvety crimson	15	1.25
Johnsonii, crimson, striped with white	.30	3.25
Vittata Hybrids, beautifully striped, flaked and feathered varieties; this grand strain, the result of crossis and recrossing, combined with careful selection, has resulted in a strain of strong, vigorous grow producing from four to six flowers on a stalk, which are perfectly circular in outline and of enormous size, ranging in color from deep crimson to dazzling orange-scarlet and from light rose to almost pure white, the darker varieties generally being striped with a band of white, the lighter colored ones have ing bright crimson lines and variegations.	ng dh, us .re v-	5.00



SINGLE NARCISSUS—Continued

BICOLOR EMPRESS. Perianth white, trumpet rich yellow, serrated at edges; a magnificent large variety, bold and erect and of rare beauty for cutting. Ea, 6c; doz., 60c; 100, \$4.00.

BICOLOR GRANDIS. Flowers large with broad white perianth, the getals of which are wide and overlapping; trumpet yellow, beautifully imbricated, a flower of great substance and fine for cutting; late flowering and valuable for succession. for succession.

for succession.
Each, 6c; per doz., 60c; per 100, \$4.00.
BICOLOR VICTORIA. Perianth creamy white, trumpet rich yellow, delicately perfumed; a strong grower with massive flowers which stand boldly erect.
Each, 6c; per doz., 50c; per 100, \$3.50.
EMPEROR. Perianth deep primrose, trumpet large, rich golden yellow; one of the finest Daffodils in cultivation, which should be in every collection; a magnificent flower, much prized for cutting. Each, 6c; per doz., 60c; per 100, \$4.00.
FIGARO. Perianth lemon yellow, cup yellow

FIGARO. Perianth lemon yellow, cup yellow shaded with orange alarge and well-formed flower, Each, 5c; doz., 40c; per 100, \$2.50.

GOLDEN SPUR. Perianth deep yellow,

yellow cup edged deep red. Ea., 6c; doz., 50c; per 100, \$3.50.

POETICUS ORNATUS. Large, pure white flowers, saffron cup, tinted with rosy scarlet; very early.

Each, 4c; per dozen, 35c; per 100, \$2.00.

PRINCEPS. Large flowers with light yellow perianth and deep yellow trumpet. Each, 5c; doz., 40c; per 100, \$2.75.

SIR WATKIN. Perianth sulphur yellow, cup slightly deeper in color and tinged with orange, flowers very large and free flowering. Each, 6c; per dozen, 50c; per 100, \$3.50.

STELLA. Perianth white and slightly twisted, yellow crown; flowers large, free blooming and one of the best for naturalizing.......Each, 4c; per dozen, 35c; per 100, \$2.25.

TRUMPET MAJOR. Flowers large and of uniform deep golden yellow; comes into bloom early and is excellent for forcing, bedding or naturalizing.

Each, 5c; per dozen, 40c; per 100, \$2.50.

Each, **5c**; per dozen, **40c**; per 100, **\$2.50**. **VON SION SINGLE**. Large flowers of rich yellow color; an excellent sort for forcing, bedding or naturalizing. Each, **5c**; per dozen, **40c**; per 100, **\$2.50**. Price per dozen and single bulb includes postage.

Narcissus or Paffodils

A BEAUTIFUL class of early blooming flowers, both for out-door blooming and for use as cut flowers in the house. Their delicious fragrance, easy culture and thriftiness, entitle them to the greatest popularity.

The double and single sorts are perfectly hardy and need not be disturbed oftener than once in three or four years, and not then unless they have become too much crowded by offsets. Plant in the Fall in good garden soil, about three or four inches deep and two to six inches apart.

The Polyanthus varieties for flowering in pots in the house are very satisfactory. They bloom about the first of February in dense clusters, two or three flower stalks to each bulb, while the earliest of all, the Paper White, will come into bloom as early as December. early as December

early as December.

A cool, natural temperature suits them best. Pot in the Fall, let them root for two or three months in the dark, then remove to the conservatory or sitting room, and water as often as the soil requires moisture.

# SINGLE NARCISSUS

ALBICANS. (White Spanish Daffodil). Perianth white, trumpet primrose changing to pure white; a beautiful flower, delicately musk scented.

Each, 6c; per dozen, 50c; per 100, \$3.50.

BARRI CONSPICUA. Large, broad yellow perianth; broad, short crown edged with scarlet; a robust, strong grower and free bloomer; should be grown in quantity for cutting, as it lasts longer than most sorts.

Each, 5c; per dozen, 40c; per 100, \$2.75.

Narcissus Barri Conspicua

Persons purchasing Narcissus at our counters or who wish to pay their own express charges may deduct 5c per dozen from these prices when bought by the dozen. Prices per 100 not prepaid.

# DOUBLE NARCISSUS

ALBA PLENA ODORATA. The double Poeticus: flowers pure white, large and very fragrant, one of the finest for all purposes..... Each, 4c; per dozen, 35c; per 100, \$2.25
INCOMPARABLE. Pale yellow and orange mixed, full double flower, large, varying somewhat in shade like the single variety, from pale citron yellow to deep orange.

Each, 5c; per dozen, 40c; per 100, \$2.50.

ORANGE PHOENIX. Large double white, with orange segments in the center. Each, 5c; dozen, 50c; 100, \$3.50.

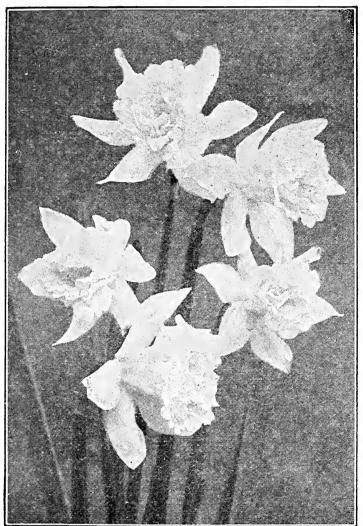
SILVER PHOENIX. Largest of the Double Narcissus, pale creamy white with sulphur, delicate fragrance, fine for cutting or for decorating purposes.

Each, 6c; per dozen, 50c; per 100, \$3.50.

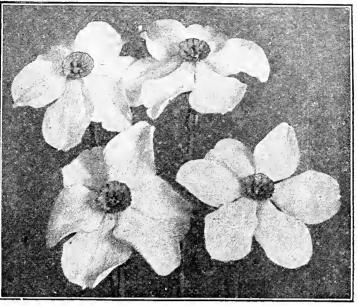
VON SION. The famous "Old Double Yellow Daffodil," rich golden yellow perianth and trumpet; one of the best forcing sorts... Each, 5c; per dozen, 40c; per 100, \$3.00.

VON SION. SELECTED EXTRA LARGE. True Northern grown Dutch Bulbs. Each, 5c; dozen, 50c; 100, \$3.50.

Price Per Dozen and Single Bulb Includes Postage.



Narcissus Double Von Sion



Narcissus Poeticus

Narcissus

Poetaz Hybrids

THESE new hardy cluster-flowered hybrids between Poeticus and Polyanthus are healthy, strong and tall growers, some of the varieties attaining a height of 2 feet. The flowers are more like Poeticus in character, but are borne in clusters like the Polyanthus. Planted in permanent quarters they form large luxuriant clumps. large luxuriant clumps.

large luxuriant clumps.

ALSACE, very early flowering, color pure white with yellow cup faintly edged red on opening.

Each, 6c; per dozen, 60c; per 100, \$4.00.

ELVIRA, pure white with yellow eye, large flower of good substance, 3 to 4 flowers on a stem; strong grower.

Each, 6c; per dozen, 50c; per 100, \$3.50.

IDEAL, pure white with dark orange eye, large truss of 6 to 7 flowers, beautiful color.

Each, 6c; per dozen, 50c; per 100, \$3.50.

IRENE, sulphur yellow, changing to light yellow, orange eye; large broad truss bearing 8 to 9 flowers.

Each, 6c; per dozen, 50c; per 100, \$3.50.

TRIUMPH, perianth white, with yellow eye, the largest flowers of this section, 3 to 4 flowers on a stem.

Each, 6c; per dozen, 60c; per 100, \$4.00.

IF YOU WANT FLOWERS In your house this Winter or in your garden next Spring
YOU MUST PLANT BULBS THIS FALL

Prices per Dozen and Single Bulb Include **Postage** 

Polyanthus Narcissus

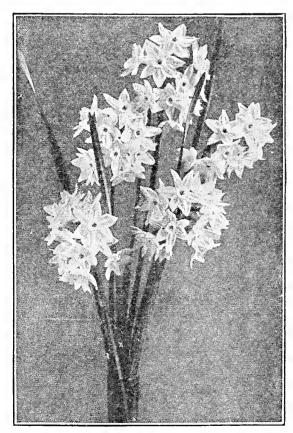
BEAUTIFUL, free flowering, deliciously sweet scented flowers of the easiest culture; suitable for forcing or for growing in water in the same way as the Chinese Sacred Lilies. Their tall spikes of bloom, bear from 6 to 12 flowers each. If planted in open borders, they must be well protected by a covering of litter.

PAPER WHITE GRANDIFLORA. An improved large flowering form of the 

Each Doz. 100 GRAND MONARQUE, pure white flowers of largest size, with yellow cups; borne on large heads......
GRAND SOLIEL D'OR, rich yellow flower with orange \$0.06 \$0.50 \$4.00 .06 4.00 GLORIOSA, white with orange cup...

MONT CENIS. A splendid large flowered variety having broad round over-lapping petals of white, and large rich yellow cup; of compact growth, carrying large clusters of flowers...

MIXED POLYANTHUS NARCISSUS. GLORIOSA .06 4.00 .05 .45 3.25



Narcissus Paper White Grandiflora

Persons purchasing Narcissus at our counters or who wish to pay their own express charges may deduct 5c per dozen from these prices when bought by the dozen. Prices per 100 not prepaid.



Chinese Sacred Lily

# **Jonquils**

EXCELLENT for early blooming. Charming, large, golden and deliciously odoriferous flowers, freely produced, of the finest effect either in garden, greenhouse or conservatory. May be successfully grown by everyone. Put six in a five inch pot and treat same as Hyacinths.

Each	$egin{array}{c} \mathbf{Per} \ \mathbf{Doz} \end{array}$	Per 100
Campernelle Rugulosus Double Flowering, a double form of the large flowering Campernelle;		
a novelty of great merit\$0.04	\$0.35	\$2.50
Double, fine golden yellow, very fragrant	.35	2.50
Campernelle, single, golden yellow, very large and		
fragrant	.30	2.25
Odorus Rugulosus, large flowering, deep yellow, crinkled flowers, exceedingly fragrant and very de-		
sirable for forcing or open garden	.30	2.25
Single, sweet-scented, deep yellow	.30	2.00

# CHINESE SACRED LILY OR ORIENTAL NARCISSUS

A LL orders should include these bulbs, as they have become most popular through their own merits, flowering in water and gravel in five to six weeks from time of planting. They grow well in pots of soil, but the most popular way of blooming them is as follows:

Put about one inch of sand in a shallow bowl, or similar vessel, about four inches deep; place the bulb on this, and pack it firmly with small pebbles or pieces of rock; then fill it with water to the top of pebbles, and place in a warm sunny window. The bulb will at once commence a rapid growth, and bloom in five or six weeks. Add fresh water as often as necessary.

It is not absolutely necessary to put the bulb in the dark, but, if shaded until the leaves begin to grow, better results may be obtained. By making a small incision across the top of the bulb, in two or three places, about three-quarters of an inch from the center it will cause a fresh lot of leaves and flower stalks to start from these points. This must be done with care, so as not to injure the bulb—simply cut the skin. For a window ornament they are unexcelled, and lend to an interior a cheerful aspect when all outside is frostbound and dreary. The effect is heightened when several are put in a large dish. They can be planted at different times, and have a succession of flowers all winter. Flowers often double and single from the same bulb.

MAMMOTH BULBS, each, 15c (if by mail, 20c each); by express not prepaid, per doz., \$1.50. Original baskets containing 30 bulbs, \$3.25.

LILY BOWLS. For Chinese Sacred Lilies and Polyanthus Narcissus: Imitation cut glass, to hold 3 bulbs, each, 25c. PEBBLES, for filling Lily Bowls, per quart 10c.

# Crocus

This brilliant and universally admired Spring flower will thrive in any soil or situation, but to be brought to the highest perfection it should be grown in an open bed or border of deep, rich, sandy loam. When planted in large groups or lines of distinct colors, the effect is very striking, and the bulbs are now offered so cheap as to justify their liberal use. They are invaluable for pot culture. To secure a succession of blooms commence planting early in October, 6 or 8 bulbs in a pot (the named varieties are best for this purpose), using rich soil and planting about an inch deep. Place the pots on a surface of ashes, cover the top one inch deep with soil until the leaves appear, when they may be removed to the house.

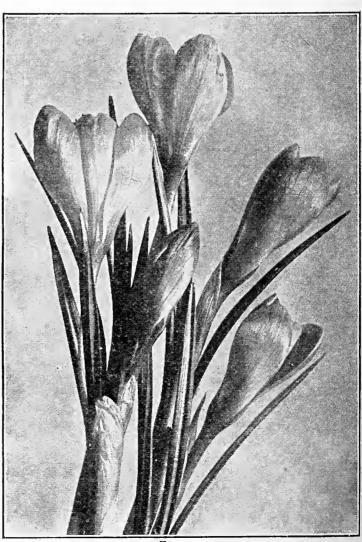
#### AUTUMN FLOWERING CROCUS

VERY effective hardy bulbous plants which bear their large flowers in the Autumn—and most of them without foliage, the latter appearing the succeeding Spring. For this reason they appear to best advantage when nestling in the grass especially on terrace or hillside. In congenial locations they thrive, increase and flower year after year.

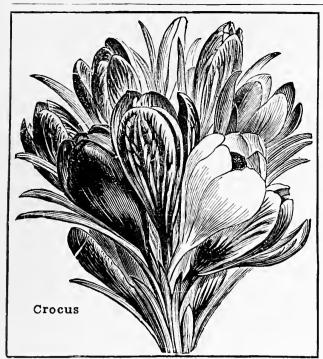
SPECIOSUS, bright lavender colored flowers feathered with blue: bright orange anthers..per dozen, 35c; per 100, \$2.50.
VERSICOLOR, large flowers, varying in color from purple to white.............per dozen, 35c; per 100, \$2.25.

#### GIANT FLOWERING CROCUS

WE offer a set of Giant Flowering Crocus—new seedlings and great improvements on older registrations. and great improvements on older varieties both in size of flowers and in coloring. The bulbs of these giants are very large, and each bulb is capable of producing several flowers. For winter flowering in pots—grown cool—they are magnificent, as well as for out door culture.



Prices on Crocus include postage. Customers may deduct 3c per doz., 10c per 100 if sent by express at their expense.



# CROCUS—Continued LARGE FLOWERING NAMED CROCUS

THESE are large bulbs of the best varieties, remarkable for richness of color and size of their flowers, and are the best to use for pot culture or where extra fine results are wanted.

Per Doz. Per 100

101	DUZ.	* CI 100
ALBION, lavender striped white and violet \$	0.35	\$2,25
BARON BRUNOW, purplish mauve, shading to deep		42.20
<b>BRION BRONOW</b> , purphsh mative, shading to deep		
purple at tips	.35	2.25
GRAND VEDETTE, light blue, large flower	.35	2.25
dans Transfer in the state, large nower		
GROOTVORST, pure white, large flower, extra fine	.35	2.25
LA MAJESTEUSE, violet striped white, large flower	.35	2.25
MAMMOTH WHITE pure white outre learn desired		
MAMMOTH WHITE, pure white, extra large flower	.35	2.25
MAMMOTH YELLOW, large golden yellow	.35	2.25
MONT DI ANG large pure relate		
MONT BLANC, large, pure white, extra	.35	2.25
NON PLUS ULTRA, light blue, with white border	.35	2.25
The state of the state, with white border		
PRINCE ALBERT, dark blue, extra fine	.35	2.25
SID WAITED SCOTT white stringed with will.		
SIR WALTER SCOTT, white, striped with violet	.35	2.25

# Calla Lilies (Richardia)

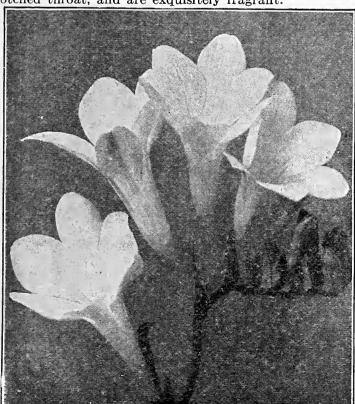
An old favorite, and of easy culture; the only requisite for successful culture are rich soil and plenty of water when growing. By allowing them to rest through the Summer, an abundance of bloom may be had the following winter.

White Calla or Lily of the Nile. This old favorite is too well known to require any description.

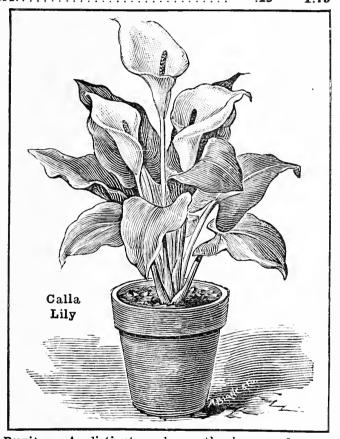
Monster Bulbs.......postpaid, each 30c; per doz. \$3.00.

# Freesia

THIS is one of the most popular and charming bulbs we offer for pot culture, flowering in the winter and spring, in the conservatory or window garden. Six bulbs should be planted in a four inch pot. They force readily, and can be had in bloom by Christmas if desired. The flowers are produced six to eight on stems about nine inches high, and are particularly useful for cutting, remaining in good condition, kept in water for two weeks; the flowers are pure white, with a yellow blotched throat, and are exquisitely fragrant.



Freesia, Improved Purity



# Lily of the Valley

PLANT in a shady place where they will not be disturbed for several years. For winter blooming they can be potted—twelve in a six-inch pot, and placed in a cool place till needed for blooming, then bring them cut to the light and warmth, and give plenty of water. Ready for delivery about December 1st.

Clumps. For out of door planting.

Each, 30c; per dozen, \$3.00.

Clumps can only be sent by express or freight at purchaser's expense.

# Suburban Lawn Grass Seed

Suburban Lawn Grass Seed, sown in Fall, makes beautiful and permanent lawns. It is also a good time to repair damage done by Fall grass, by raking it out as soon as it dies down and sowing Lawn Grass Seed on the bare spots.

# Lilies

No CLASS of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color. stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all other hardy plants, and no herbaceous border, however select, should be without a few of its best sorts. With a well selected collection, Liliums may be had in bloom from June till October.

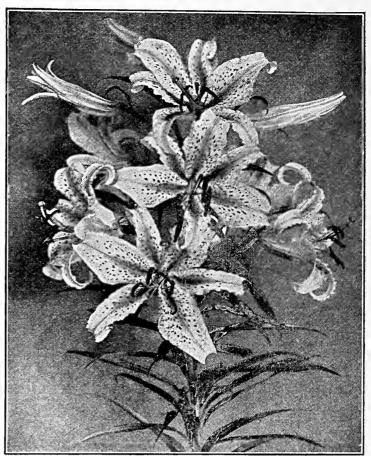
-They should be planted in good, rich, loamy soil, abundantly mixed with very rotten cow manure. Plant about four inches deep, and during the Winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In Spring the manure may either be removed or dug in between the rows.

Pot Culture—The best soil to use is a rich loam, with the addition of one-third well-rotted manure. Select a large sized pot, say eight or ten inches, so as to allow of deep planting—a most essential matter where there are upper roots to protect. Dust a little charcoal about the bulb to deep it fresh, and cover at least two inches with soil.

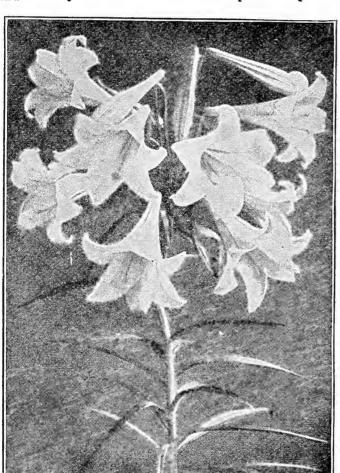
After potting, one of the most important things to observe is the proper placing of the pots containing the bulbs. Like all other bulbs, to get the best results in flowering, the pots must be filled with roots before the top starts to grow; and to do this, they must be placed in some cool place and excluded from the light, until, on examination, the roots are found to be formed around the ball of earth.

Orders for Lillies cannot be filled before November, excepting for Candidum and Harrisii, which are ready August 1.

Prices on single bulbs are postpaid. By the dozen or hundred they will be forwarded at expense of purchaser.



Lilium Auratum



Lilium Longiflorum Giganteum

AURATUM, (Golden-banded Lily). Undoubtedly one of the finest. Its large, graceful, fragrant flowers are composed of six petals of a delicate ivory-white color, thickly studded with chocolate crimson spots, and striped through the centre with a golden-yellow band; 3 to 5 feet.
Large Bulbs, 8 to 9 inches, each, 40c; per dozen, \$4.00; per 100, \$30.00.
Extra Large Bulbs, 9 to 11 inches, each, 60c; per dozen, \$6.00; per 100 \$45.00.

CANDIDUM, (Annunciation or Madonna Lily). One of the most popular of garden Lilies. The flowers are pure white and very fragrant, borne on long stems. To succeed with it, it should be planted early in the autumn, so that it can make some growth before frost; 3 to 4 feet; May-June.

Large Bulbs, each 20c; per doz. \$1.50; per 100 \$10.00.

Extra Large Bulbs, each 25c; per doz. \$2.25; per 100 \$15.00.

HARRISII, (Bermuda Easter Lily). This splendid Lily is undoubtedly one of the best for house culture, as it comes quickly into bloom and flowers freely. The flowers are trumpet shaped, pure waxy white and delightfully fragrant. Bulbs should be potted in a rich soil, using a five to eight-inch pot, according to the size of bulb, and the pots plunged in a cold frame or kept in a dark, cold place, to get a strong root growth before the top starts; when well rooted they may be brought into gentle heat and forced into bloom.

Small Bulbs, 5 to 7 inches, each 20c; per doz. \$2.00; per 100 \$15.00. Large Bulbs, 7 to 9 inches, each 40c; per doz. \$4.25; per 100 \$30.00.

LONGIFLORUM FORMOSUM. The plants are of healthy, strong growth—about 3 feet high and produce beautiful, snow white, trumpet shaped flowers, 6 to 8 inches long. It is perfectly hardy, blooming in the open in June and July. This lily is also a very important winter flowering type.

Small Bulbs, 6 to 8 inches, each 30c; per doz. \$3.25; per 100 \$25.00. Large Bulbs, 7 to 9 inches, each 40c; per doz. \$4.25; per 100 \$30.00.

LONGIFLORUM GIGANTEUM. A splendid type, later flowering than the others but of strong, free, healthy growth, and while it can be forced into bloom for Easter it is just the thing for Decoration Day and later flowering; quite hardy and good for outdoor planting.
Large Bulbs, 7 to 9 inches, each 40c; per doz. \$4.25; per 100 \$30.00.

Japan Lily". The varieties of this class are magnificent border plants, and also excellent for pot culture. All are perfectly hardy, and are among the most satisfactory Lilies to grow. SPECIOSUM.

ALBUM, pure white, very fragrant. Large Bulbs, 8 to 9 inches, each 40c; per doz. \$4.00; per 100 \$30.00. Extra Large Bulbs, 9 to 11 inches, each 60c; per doz. \$6.00, per 100 \$-5.00. SPECIOSUM.

White, suffused and spotted with crimson.

Large Bulbs, 8 to 9 inches, each 40c; per doz. \$4.00; per 100 \$20.00.

Extra Large Bulbs, 9 to 11 inches, each 60c; per doz. \$6.00; per 100 \$45.00. RUBRUM or ROSEUM. SPECIOSUM.

TIGRINUM. "Tiger Lily." Orange salmon, spotted with black.........Each 20c; per doz. \$2.00; per 100 \$15.00.

TIGRINUM FLORA PLENO. "Double Tiger Lily." This is a plant of stately habit, bearing an immense number of double, bright orange red flowers, spotted with black, to 5 feet. August.... Each 25c; per doz. \$2.50; per 100 \$20.00. If you contemplate making a Lily bed, kindly give us dimensions of same, and we will be pleased to submit you an estimate, stating suitable varieties and lowest cost.

# Iris, Spanish (Iris Hispanica)

THESE have appropriately been called "the Orchids of the Hardy Flower Garden." They are of the simplest culture, succeeding in almost any soil or position. The bulbs should be planted 2 to 3 inches deep and 6 inches apart, early enough in the autumn to allow them to make some growth before hard frost comes. For best effect they should be planted in beds or groups of 25 to 100 or more bulbs—the larger the number the finer the effect. They flower in June, and the bulbs may either be lifted or allowed to remain for another season.

BRITISH QUEEN, pure white, the largest and best.

CHRYSOLORA, canary yellow, large flower; early.

KING OF THE BLUES, rich dark blue, an especially good variety.

LA TENDERESSE, creamy white, large flower, tall growing.

LOUISE, light blue, very large, finest for cutting.

The above varieties, each 5c; per doz., 45c; per 100, \$3.00.

FINEST MIXED. All Colors, each, 5c; per doz., 45c; per 100, \$3.00.

JAPANESE and LIBERTY IRIS. See page 28.

# Ixias

THESE are among the most graceful and beautiful winter-flowering bulbs. The colors are rich and varied, the center differing in color from other parts of the flower. Plant twelve bulbs in a six-inch pot and set in a cool place, water sparingly until some growth is made, then remove to warmer quarters to bloom.

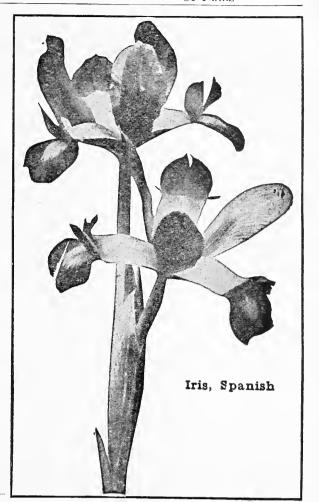
Mixed Varieties. All colors. Per doz., 30c; Per 100, \$2.00.



# xalis

UTTERCUP. A splendid win-ter-blooming plant for pot culture. The flowers are pure,

bright yellow, and produced in great abundance. It is very easily cultivated, and, being a strong grower, only one or two bulbs should be planted in a 5 or 6 in. pot. Per doz., 35c; per 100, \$2.00.



# Islyacinth Glasses

# Hyacinth Glasses CAN NOT be sent by mail

BELGIAN or TALL SHAPE—Blue, Claret, Crystal and Green Colors. Each, 25c; per doz., \$2.50.

TYE or LOW SHAPE—Blue, Claret, Crystal and Green Colors. Each, 25c; per doz., \$2.50.

LILY BOWLS—For Chinese Sacred Lilies and Polyanthus Narcissus.

Imitation Cut Glass—to hold one Bulb.....Each. 25c; for 3 Bulbs. 30c.

PEBBLES—For filling Lily Bowls, 10c per quart. TILA BOMP2-

# Mushroom Spawn

MUSHROOMS can be successfully and profitably grown during the winter and spring months in frames under greenhouse benches, in the open fields, or in cellars or out-houses.

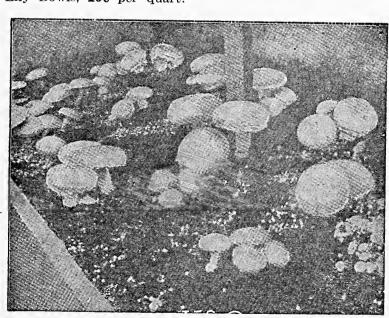
One pound of Spawn is sufficient for a bed 2 x 6 feet.

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh Spawn of the best manufacture.

English Milltrack Mushroom Spawn. Our celebrated English Milltrack brand (made by the best maker in England especially for our trade) has gained an enviable reputation among critical growers for its uniform good quality, and can be thoroughly relied upon to produce a good crop of the best Mushrooms. Commercially, it is more planted than any other Spawn. It comes in pressed bricks weighing about 20 ounces. They are broken into pieces the size of a walnut and put sidewise in the beds 10 to 12 inches apart each way. Prices, by express—customer to pay charges—per brick, 25c; per lb., 20c; 10 lbs., \$1.75; 100 lbs., \$12.00. By mail, 30c per brick, postpaid.

Treatise on Mushroom Culture, 10c, or given with an order of 10 lbs. of Mushroom Spawn.

Mushroom Culture. (Wm. Falconer.) The most practical work on the subject; \$1.00.

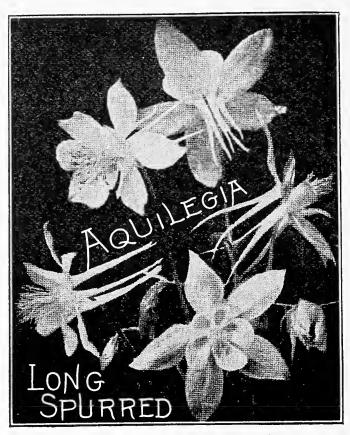


American Made Pure Culture Mushroom Spawn. A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce Mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express—customer to pay charges—per brick, 30c; 5 bricks, \$1.25; 100 bricks, \$20.00. By mail, 35c per brick; 5 bricks, \$1.50, postpaid.

Special Prices will be given to those who use Mushroom Spawn in quantity.

# McCullough's Selected Flower Seeds

# FOR FALL AND WINTER SOWING



ON the following pages we give a list of the **Best Hardy Perennials** which are now so deservedly popular. Sown this fall in a cold frame or protected corner of the garden, you can have, with little trouble, an abundant supply of Columbines, Canterbury Bells, Delphiniums, Foxgloves, Gaillardias, Hollyhocks, Forget-menots, Daisies, Sweet Williams, etc., etc., the following season. The list also includes a choice selection of other Flower Seeds for Autumn sowing, such as Cyclamens, Pansies, Primulas, etc.

### Discount on Packet Flower Seeds

For 25 Cents select 6 Five-cent, or 3 Ten-cent pkts. For 50 Cents select Packets to the amount of 65 Cents. For \$1.00 select Packets to the amount of \$1.30. For \$2.00 select Packets to the amount of \$2.65. For \$3.00 select Packets to the amount of \$4.00. FULL CULTURAL DIRECTIONS ON EACH PACKET. WE PAY THE POSTAGE.

Abutilon. (Chinese Bell Flower.) Finest mixture. Half Hardy Perennial......10c pkt.

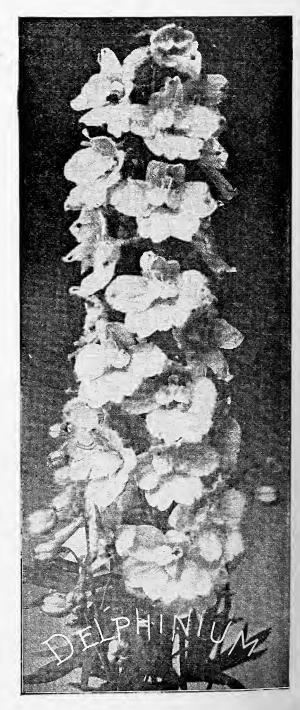
Alyssum.—Sweet. Flowers pure white.....Oz., 25c; 5c pkt.

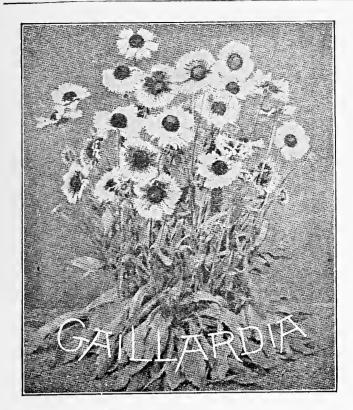
'' Little Gem. Dwarf compact habit, pure white flowers.....Oz., 40c; 5c pkt.

Antirrhinum. Grandiflorum. Dwarf, Finest Mixed. 5c pkt.

Tall, Finest Mixed. ... 5c pkt.

Aquilegia. (		Alba Flora Plena5c pkt.
4.4	4.6	Californica Hybrida. Coerulea.
4.4	44	3 pkts., 25c; 10c pkt.
• •		Coerulea Hybrida10c pkt.
4.6	* *	Double, Finest Mixed 5c pkt.
"	"	Single, Finest Mixed
Bellis. (Dou	ble Daisy.)	Longfellow. Large dark rose; extra fine. 10c pkt.
	**	Snowball. Large double white, with long
		stems10c pkt.
	-	Giant Double Mixed. Extra fine10c pkt.
Calceolaria	Hybrida Gr	andifiora. Large flowers of fine form and beautifully spotted and marbled. The finest
substance	; rich colors,	beautifully spotted and marbled. The finest
strain in	cultivation	of the second se
Campanula,	Persicifolia	Grandiflora. One of the best. 3 pkts., 25c; 10c pkt.
"	Calycanther	ma. Double, Finest Mixed5c pkt.
"	"	Single, Finest Mixed5c pkt.
Candytuft	Empress. I	Large trusses of pure white flowers, fine florists'
	variety	Oz., 40c; 5c pkt.
"		et. Pure white, large truss. Oz., 20c; 5c pkt.
"	Sempervire	ns. A white-blooming hardy perennial,
44	adapted 10	or rockeries, baskets, etc.; 1 foot5c pkt.
	with white	a <b>Hybrida</b> ( <i>Perennial</i> .) Very fine species, e flowers, shading off to lilac: 1 foot.
		3 pkts., <b>25c</b> ; <b>10c</b> pkt.
Carnation.—	Extra Choic	e Mixed. From the finest named varieties.  15c pkt.
6.6	Marguerite.	Finest Mixed; excellent for cutting.  1/4 oz., 50c; 5c pkt.
Cineraria H	vbrida Gra	ndiflora. Finest large flowering exhibition
varieties	embracing the	e richest and most varied, showy and attractive
colors		
Coreopsis La	nceolata Gr	andiflora. Bright golden yellow flowers with
broad frii	nged petals o	on long stems; excellent for cutting. Hardy
		10c pkt.
blooming	i <b>ganteum.</b> plants for tl	One of the most beautiful Winter and Spring he conservatory or parlor culture.
0	_	3 pkts., 50c; 25c pkt.
Delphinium,	Chinese. A with fine	distinct variety growing about 1½ feet high feathery foliage3 pkts., 25c; 10c pkt.
6.6	Elatum (B	Gee Larkspur.) Rich deep blue, very free 4 feet 5c pkt.
€ C	Elatum Hy	bridum. Fl. Pl. Finest double sorts in choice
66		superb mixture3 pkts., 25c; 10c pkt.
	with a wh	Beautiful spikes of brilliant rich blue flowers, nite center; $2\frac{1}{2}$ feet
66	Kelway's H	lybrid. The finest strain of Larkspurs. The
	double an	kes are stiff and strong, crowded with flowers, d single, shading from light blue to the most
	intense ind	digo and purple shades. Extra fine10c pkt.
		The party of the p





# FLOWER SEEDS-Con't

Dianthus. Plumarius. Fl. Pl. Double and Semi-double varieties in beautiful colors...3 pkts., 25c; 10c pkt.

Semperflorens. (Everblooming Hardy Garden Pink.) Finest mixed....2 pkts., 25c; 15c pkt.

Digitalis. (Foxglove.) A splendid strain. Finest mixed.

5c pkt.

Grandiflora Compacta. Splendid mixed varieties:

Hardy Perennial......5c pkt.

Hollyhock. Double Crimson.
Pink, Scarlet,
White, Yellow
and Chaters
Prize Mixed.
Each.. 10c pkt.

Hollyhock.—Ever-blooming. Double and semi-double flowers. Colors vary from white to blood-red and black......10c pkt.

Mammoth Fringed Allegheny. Extra fine strain.

3 pkts., 25c; 10c pkt.

Mignonette, Allen's Defiance. Enormous spikes, with individual florets of immense size, fragrant, excellent for forcing.

Oz., 75c; 10c pkt.

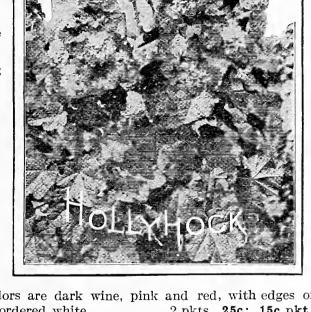
Mignonette, Machet. Dwarf pyramidal growth, large spikes; deliciously fragrant; one of the best for forcing. Oz., 75c; 3 pkts., 25c; 10c pkt.

Myosotis Palustris. The true forget-me-not; beautiful blue flowers: 6 inches...... 3 pkts., 25c; 10c pkt.

Myosotis Palustris Semperflorens. A charming dwarf "forget-me-not," continuing to bloom from early Spring until Autumn; blue.

3 pkts., 25c; 10c pkt.

## MASTODON PANSIES



Madame Perrett. Colors are dark wine, pink and red, with edges of petals frilled and bordered white...........2 pkts., 25c; 15c pkt.Meteor. Flowers a beautiful shade of wine red, very free bloomer.

2 pkts., 25c; 15c pkt.

Panama Pacific. Flowers of immense size, deep yellow.

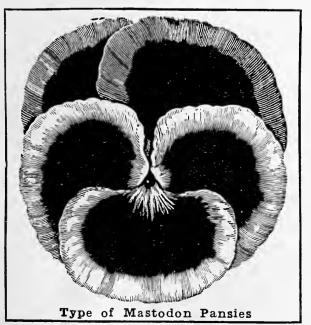
2 pkts., 25c; 15c pkt.

Parisian Yellow. Flowers of pure yellow, of grand form and size.

2 pkts., 25c; 15c pkt.

McCullough's "Premier." This strain is saved from the finest flowers from the best growers of pansies. The plants are compact and of robust growth. Florists and amateurs desiring charming "show" flowers should not neglect this strain, as it is the result of many years careful selection and hybridization.. 1/4 oz., \$2.00; 25c pkt.

mixture contains all the most showy and distinctly marked varieties. For freedom of bloom none surpass them.... 1/4 oz., 25c; 5c pkt.



# FLOWER SEEDS-Con't

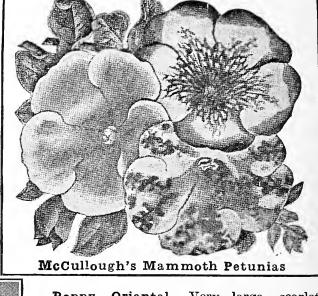
Petunia-Double. Grandiflora Mixed. Choicest strains of fine colors and large flowers......25c pkt.

Petunia-Single. McCullough's Mammoth. The finest mixture procurable...... 3 pkts., 50c; 20c pkt.

Phlox—Perennial Hybrids. (Phlox Decussata.) Tall-growing, perfectly hardy class, with immense trusses of large and beautiful flowers, in the greatest variety of colors; 3 feet.

3 pkts., 25c; 10c pkt.

Poppy—Iceland. (Papaver Nudicaule.) One of the most effective and beautiful. They are perfectly hardy and produce an endless profusion of flowers, graceful habit, with pretty fern-like foliage; finest mixed...... 3 pkts., 25c; 10c pkt.



Poppy-Oriental. Very large, scarlet, with blotch on each petal; magnificent border plant; 3 feet.........5c pkt.

Poppy—Orientale Hybrids. Beautiful new hybrids of the Oriental Poppy, producing flowers of immense size; six inches and over in diameter, and of many novel colors, such as salmon, pink, cherry, etc.

3 pkts., 25c; 10c pkt.

Primula Chinensis Fimbriata. Finest mixed. All colors......20c pkt.

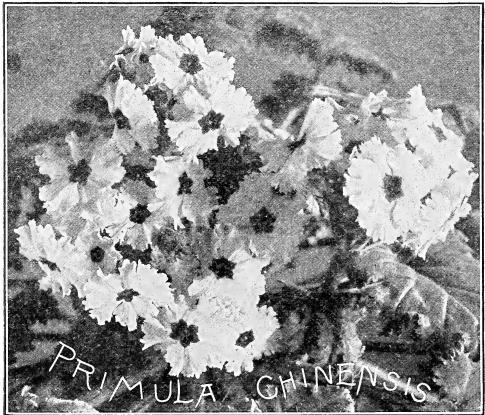
Primula Forbesi. (Baby Primrose.) Rosy lilac flowers; fine for pots.

3 pkts., 25c; 10c pkt.

Primula Obconica Gigantea. Strong vigorous growth with immense heads of large individual blooms.

2 pkts., 25c; 15c pkt.

Primula Obconica Grandiflora Fimbriata. Large flowers with finely fringed and toothed petals; a beautiful pot plant. 2 pkts., 25c; 15c pkt.



Pyrethrum—Single Hybrids. Large flowers, choicest colors, saved from named varieties. Finest mixed... 3 pkts., 25c; 10c pkt. Stock.—Princess Alice. (Cut and Come Again.) Pure white, one of the earliest. It throws out numerous side branches, bearing clusters of fragrant blossoms. Excellent for cutting.

3 pkts., 25c; 10c pkt.

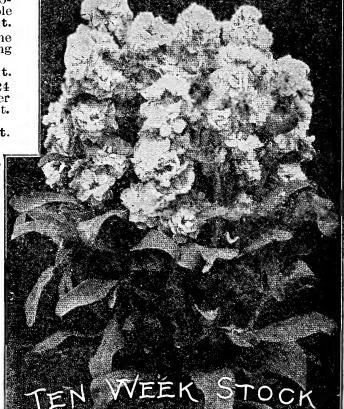
inches high; each plant producing 20 to 30 handsome lavender blue, cornflower-like blossoms; in full bloom from July till frost. One of the best hardy border plants; fine for cutting.

3 pkts., 25c; 10c pkt. Stokesia Cyanea.

Verbena-Mammoth Defiance. Brilliant scarlet, fine for bed-..... 10c pkt.

Verbena-Mammoth Candidissima. Large trusses of pure white flowers.

Verbena—Mammoth Pink. Bright shades of pink....10c pkt. 



# Discount on Packet Flower Seeds

For 25 Cents select 6 Five-cent, or 3 Ten-cent pkts. For 50 Cents select Packets to the amount of 65 Cents. For \$1.00 select Packets to the amount of \$1.30. For \$2.00 select Packets to the amount of \$2.65. For \$3.00 select Packets to the amount of \$4.00. FULL CULTURAL DIRECTIONS ON EACH PACKET. WE PAY THE POSTAGE.



#### WILL MAKE A BETTER LAWN THAN TURF OR SOD

McCullough's "Suburban"
Lawn Grass Seed

mixture of the finest Dwarf Evergreen Grasses that grow and flourish during McCullough's "Suburban" different months of the year so that a rich, deep green, velvety lawn is constantly maintained. Our mixture is the result of several years experimenting, and, as we now offer it, is unequaled. The quantity required for making a new lawn is four bushels (64 lbs.) per acre, or for renovating old lawns, two bushels (32 lbs.) per acre. For a plot 15x20, or 300 square feet, one pound is required for a new lawn, or about one-half pound for renovating.

If it is honestly made, a lawn seed mixture is very much to be preferred to any single grass, because the several varieties of grasses which compose it, mature at different seasons of the year, thus keeping the green sward in good color and condition during the hot weather, not losing its color, as the single variety is liable to do.

How to Make a Lawn.—The matchless beauty of a well kept lawn instantly commands the attention of all lovers of the beautiful in Nature, because a fine lawn is an unfailing mark of intelligence and taste, to obtain which the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture: the surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken; ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels (64 lbs.) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains a height of 4 or 5 inches, carefully mow with a sharp scythe. After this, according to the season, it should be mown with a lawn mower every week or ten days.

General Surface Renovating.—When your lawn has been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake off all dead leaves, etc., and give the lawn a dressing of our pulverized SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Lawn Grass Seed at the rate of two bushels (32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

Renovating in Spots or Patches.—Everyone is aware that even in the best-kept lawns unsightly spots devoid of grass will appear, which are caused by root-destroying insects; and as these spots are not protected by a covering of turf during the winter, as a natural consequence, the chemical elements in the soil are leached out by the action of the weather, causing them to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover them with either of the fertilizers mentioned above at the rate of 13 lbs. for each 300 square feet, then dig these spots up, and after raking until no trace of the fertilizers can be seen, sow our "Suburban" Lawn Grass Seed at the rate of 1 lb. to each 300 square feet. Roll thoroughly or pat with the back of a spade. When any weeding is done on the lawn immediately drop a few grains of seed wherever a weed is removed, and while the soil is disturbed press the seed into the soil.

Prices: 1/2 lb., 20c; 1 lb., 35c; 3 lbs., \$1.00; 5 lbs., \$1.50; 1/2 bu. (8) lbs., \$2.15; per bu. of 16 lbs., \$4.00. Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

NOTE:—The price of "Suburban" Lawn Grass Seed" is based upon sixteen pounds to the bushel. We mention this because there is no standard weight per bushel for Lawn Grass Seed in the United States; those who prefer to buy by weight may base their calculations in this way.

Owing to the cleaning process that our "Suburban" Lawn Grass Seed is put through it will be found to centain a much larger per cent of actual seed and less chaff than ordinary Lawn Seed.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

# MCCULLOUGH. "SHADY-PLACE" LAWN GRASS SEED

On nearly all lawns there are more or less shady places, which result in having bare and unsightly spots on which the owners have difficulty in securing a satisfactory stand of grass. After many years of experimenting with different grasses, both native and foreign, we several years ago developed our present "Shady Place" Lawn Grass Seed Mixture. This mixture of grasses is adapted for such places, as it is composed of dwarf-growing grasses which are found naturally growing in shady locations. Should the ground have become "sour" or drainage defective, it is apt to be covered with moss. If such is the case, the moss should first be removed by the use of a sharp rake, then apply Evr Green Lawn Lime to sweeten it, and after another thorough raking, apply commercial Fertilizer at the rate of not less than 600 pounds per acre, then sow the seed at the rate of four bushels (64 lbs.) per acre, or 1 lb. to each 300 square feet, after which roll thoroughly.

Prices:—½ lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 8 lbs., \$2.50: per bushel of 16 lbs. \$5.00.

Prices:— $\frac{1}{2}$  lb., 25c; 1 lb., 40c; 5 lbs., \$1.75; 8 lbs., \$2.50; per bushel of 16 lbs., \$5.00. Postage must be added if wanted by mail. See Postal Rates, second page of cover.

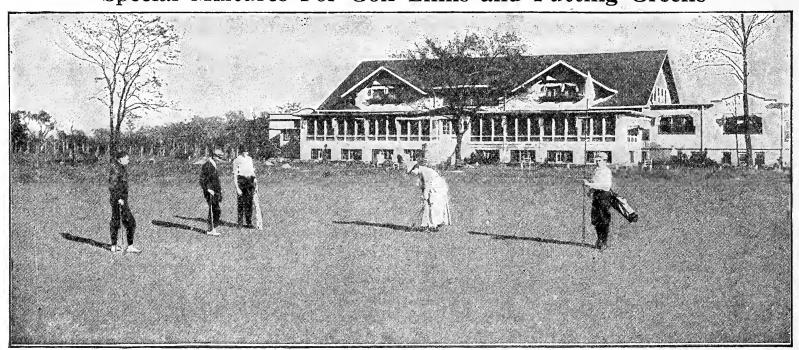
# McCullough's Eden Park Lawn Grass Seed

### TERRACE MIXTURE

There is nothing more annoying than to have ground washed out. In this mixture we have put quick-growing and deep-rooted grasses. Of course, it depends a great deal on this being well started before very heavy rains.

Per lb., 35c; 5 lbs.; \$1.50; per bushel of 16 lbs., \$4.00.

# Special Mixtures For Golf Links and Putting Greens



View of one of the Putting Greens on the Golf Grounds of the Hyde Park Country Club, Cincinnati, Ohio, where our Putting Green Mixture has produced a "Green" three weeks from time of sowing the seed.

### PUTTING GREEN MIXTURE

Having specialized for over three-quarters of a Century in all varieties of Grass Seeds and having become familiar with the habits and characteristics of all cultivated grasses, we were prepared to develop the Mixture of Grasses herewith offered by us, after making a careful study of the requirements for producing the most substantial turf for Putting Greens.

The numerous testimonials we have received establishes the fact that our Mixture of Grasses will produce the results desired, because it has given thorough satisfaction wherever used, and produces a thick, tough, beautiful green turf. The varieties comprising this Mixture of Grasses are all the finest-bladed, low-growing and most hardy kinds. and will maintain their rich, velvety green color throughout the season. Per lb., 40c; 5 lbs., \$1.75; per bushel of 16 lbs., \$5.00.

Quantity of Seed to Sow. One pound of these mixed season.

Per lb., 25c; 5 lbs., \$1.00; 8 lbs., \$1.50; per bushel of 16 lbs., \$3.00.

Quantity of Seed to Sow. One pound of these mixtures will sow 15 x 20 feet, or 300 square feet. Four bushels should be sown to the acre. For renovating use one-half of this quantity.

Pulverized Sheep Manure and Pure Bone Meal are the Best Fertilizers for Lawns. See Fertilizers.

We wish to emphasize the fact that one of the important essentials for success in building lawns, lies in the abundant use of Fertilizers, which should be applied at the rate of not less than 600 pounds per acre.

# GOLF LINKS MIXTURE

WE have given much attention to grasses for golf links. The mixture of grasses we offer below is composed of such varieties as will thrive here, and are the result of experiments conducted on our grounds, as well as careful observation for several years of the practical results obtained on those golf links, for which we have supplied the seed. We have always on hand all the natural grasses of Europe and America and we are familiar with the habits and merits of each. We shall be glad to prescribe for whatever the requirements of the links may be; for poor lands or rich, high and dry, or low and wet.

# McCullough's Grass Seeds



We specialize in Grass Seed of all kinds and for every purpose

POR many years Grass Seeds have been one of our most FOR many years Grass Seeds have been one of our most important specialties, and our improved and perfected facilities for handling same (at a minimum cost), either in small or car lots, enables us to offer our customers the best possible service, both as to quality and promptness in executing orders.

We have four or five different grades of Grass Seeds, especially of the kinds most in demand, such as Clovers, Timothy, Blue Grass, Red Top, Orchard Grass, etc.

We will be pleased to quote lowest market prices on application.

For best results, we advise the use of our highest grades "XXXX" and "Buckeye."

We are the largest buyers in this section of high grade Seeds and will always pay the highest market price. Submit samples and name quantity to offer.

Our prices include delivery to freight or express depots here, purchaser paying transportation charges.

We make no charge for burlap bags for Blue Grass, Red Top in Chaff, Orchard Grass, Perennial Rye and other light Grass Seeds.

Seamless bags for Clover, Timothy, Fancy Red Top and other heavy Seeds and Seed Grain are 60c each. extra.

The number of pounds to the bushel, in brackets, is the

Kentucky Blue Grass

Top and other heavy seeds and seed Grain are 600 each.

extra.

The number of pounds to the bushel, in brackets, is the old way of offering grasses, and is mentioned merely for reference.

We expect to adhere closely to prices quoted in this list, but owing to market fluctuations, it is impossible to guarantee prices.

All orders will be filled at lowest market price on the day of receipt.

Postage Must Be Added if Wanted by Mail. See Postal Rates, Second Page of Cover

# KENTUCKY BLUE GRASS

(Poa Pratensis)

(Poa Pratensis)

A LSO known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture grass. Especially suited to meadows and rich lands. It is the grass of the famous and fertile lime-stone soils of Kentucky, and is no less a favorite all through the Northern States. A perfect lawn grass. Sow 30 to 40 lbs. per acre for lawn; 2 bushels (28 lbs.) to the acre for pasture (14 lbs. per bushel.)

Kentucky Blue Grass Seed, Fancy Cleaned.

Per lb., 30c; 7 lbs., \$2.00; per bushel of 14 lbs., \$3.75.

Write for special prices on large quantities and other grades.

other grades.

NOTE:—We wish to call attention to the fact that Cincinnati is the leading market in the world for Kentucky Blue Grass Seed. We export many carloads annually, the words "McCullough" and "Kentucky Blue Grass" being very familiar to the principal Seed dealers of the world.

# ORCHARD GRASS

(Dactylis Glomerata)

R OUGH Cocksfoot. Perennial. Height, 3 feet. It blossoms about the same time as Red Clover, making it, on that account a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. Sow 25 to 35 lbs. to the acre. (14 lbs. per bushel.) Market Price.

# RED TOP GRASS

(Agrostis Palustris or Alba)

(Agrostis Palustris or Alba)

HERD'S Grass, Quick Grass. Perennial; height 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to 2½ feet. Sow, if alone, 40 to 50 lbs. per acre. (14 lbs. per bushel.)

Fancy Red Top Pure Seed.

Weight, about 30 lbs. per bushel. Sow 10 to 12 lbs. per acre.... Per lb., 25c; 10 lbs., \$2.25; per 100 lbs., \$20.00.

Choice Red Top Seed in Chaff.

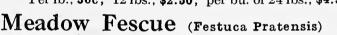
Per lb., 20c; 7 lbs., \$1.25; per bu. of 14 lbs., \$2.25.

#### Perennial or English Rye Grass (Lolium Perenne)

IMPORTED English Blue Grass. Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground, and soon forms a compact sward. After being cut it grows up in a very short time, and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay if cut when in blossom, as it is then most nutritious. Sow, if alone, 50 to 60 lbs. per acre. (24 lbs. per bushel.) Per lb., 25c; 12 lbs., \$2.25; per bushel of 24 lbs., \$4.00.

# Pacey's Improved Short Rye Grass

SIMILAR to Perennial Rye Grass, but does not grow so tall, consequently is superior for lawn purposes. (24 lbs. per bushel.) Sow, if alone, 50 to 60 lbs. per acre. Per lb., 30c; 12 lbs., \$2.50; per bu. of 24 lbs., \$4.50.



(Erroneously called English Blue Grass)

HIGHLY valuable for permanent grass land. Does not, however, attain its full productive power till the second or tnird year. Relished by live stock, both in hay and permanent pasture, and is one of the most desirable grasses for general culture. Sow 30 to 40 lbs. to the acre. (24 lbs. per bushel.) This is the true Evergreen Grass of the South. Price on Application.

# Awnless Brome Grass (Bromus Inermis)

HARDY perennial, standing extremes of heat, cold and A HARDY perennial, standing extremes of near, cond and drought. In the South it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the Spring as the ground can be worked. (10 lbs. per bushel.) Sow 25 to 30 lbs. to the acre. Market Price.

# Bermuda Grass (Cynodon Dactylon)

A VALUABLE grass for the South and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre. Write for prices.

### Canadian Blue Grass (Poa Compressa)

A LSO called Flat-stemmed Poa, Flat-Stalked Meadow Grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. Sow 30 to 40 lbs. per acre...... Per lb., 20c; 10 lbs., \$1.75.

Creeping Bent (Agrostis Canina)

VALUABLE in mixture with other grasses for lawns, etc. Suitable also for moist localities. (12 lbs. per bushel.) Sow 30 to 40 lbs. per acre. Market Price.

# Crested Dogstail (Cynosurus Crystatus)

A N excellent grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious and relished by all stock. (21 lbs. per bushel.) Sow, if alone, 30 to 35 lbs. per acre. Perennial. Height, 1 to 1½ feet. Price on application.

# Fine-Leaved Sheep Fescue (Festuca Ovina Tenufolia)

variety for hay if cut when in blossom, as it is itritious. Sow, if alone, 50 to 60 lbs. per acre. bushel.) Per lb., 25c; 12 lbs., \$2.25; per lbs., \$4.00.

Impossible to quote firm prices on "Fancy Grass Seeds" at time of going to press.

Write for special prices on New Crop Seeds.

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# GRASS SEEDS—Continued

Hard Fescue (Festuca Duriuscula)

PERENNIAL. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. Sow. if alone, 30 to 35 lbs. per acre. (12 lbs. per bu.) Market Price.

Italian Rye Grass (Lolium Italicum)

BIENNIAL. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 45 to 50 lbs. per acre. (18 lbs. per bushel.)

Per lb., 30c; 10 lbs., \$2.00; 100 lbs., \$17.50.

Red Fescue (Festuca Rubra)

A CREEPING-ROOTED species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses. 40 lbs. to the acre. (24 lbs. per bushel.) Price on application.

#### Rhode Island Bent (Agrostis Tenuis)

A fine grass, chiefly used for pastures and lawns, for which it is one of the best. (12 lbs. per bushel.) Sow 25 to 40 lbs. per acre. Write for prices.

### Sweet Vernal Grass

For a mixture with pasture grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor, which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other grasses.

True Perennial. (Anthoxanthum Odoratum.)

Annual. (Anthoxanthum Odoratum Puelli.) Much smaller than the perennial. Write for prices.

Sheep Fescue (Festuca Ovina)

Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. (14 lbs. per bushel.) Sow 30 to 35 lbs. per acre. Price on application.

#### Tall Meadow Oat Grass (Avena Elatoir)

A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrying deeply in the soil, enabling it to withstand drought and cold. Sow 25 to 30 lbs. per acre. Market Price.

Timothy (Phleum Pratense)

Herd's Grass, Cat's-tail Grass. This grass stands at the head for meadows. Never use less than a peck to the acre, then up to one-half bushel, as to circumstances. Write for prices.

# Various Leaved Fescue

(Festuca Heterophylla)

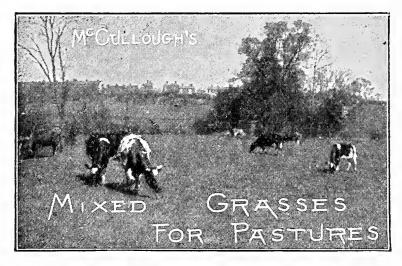
A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks. 40 lbs. to the acre. Market

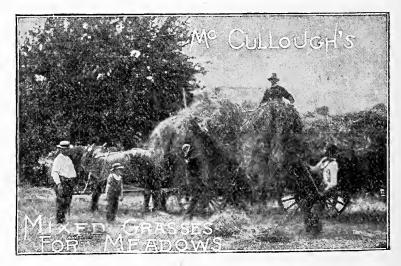
### Wood Meadow Grass (Poa Nemoralis)

No grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other grasses can exist. Sow 20 to 25 lbs. to the acre. Market Price,

We specialize in Grass Seed of all kinds and for every purpose.

Impossible to quote firm prices on "Fancy Grass Seeds" at time of going to press. Write for special prices on New Crop Seeds.





# McCULLOUGH'S MIXED GRASSES for Meadows and Pastures

AFTER years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties than when only one or two are used. There are always certain grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our Mixture for Permanent Pastures, grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our Mixture for Permanent Meadow will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of grasses for light, medium or heavy soils; by light soil we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice recleaned seeds, while in our second quality we use the same seeds, but without recleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be used per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

# First Quality Mixtures

For Meadows
Per lb., 30c; 8 lbs., \$2.25; bu. of 16 lbs., \$4.00. For Permanent Pasture Per lb., 30c; 8 lbs., \$2.25; bu. of 16 lbs., \$4.00.

For Pasture and Hay in Orchard and Other Shady Places
Per lb., 30c; 8 lbs., \$2.25; bu. of 16 lbs., \$4.00.

For Marshy Grounds
Per lb., 30c; 8 lbs., \$2.25; bu. of 16 lbs., \$4.00.

For Sandy and Rocky Grounds Per lb., 30c; 8 lbs., \$2.25; bu. of 16 lbs., \$4.00.

# Second Quality Mixtures

For Meadows 8 lbs., \$2.00; bu. of 16 lbs., \$3.75. For Permanent Pasture 8 lbs., \$2.00; bu. of 16 lbs., \$3.75. For Pasture and Hay in Orchard and Other Shady Places 8 lbs., \$2.00; bu. of 16 lbs., \$3.75.

For Marshy Grounds 8 lbs., \$2.00; bu. of 16 lbs., \$3.75.

For Sandy or Rocky Grounds 8 lbs., \$2.00; bu. of 16 lbs., \$3.75.

Postage must be added if wanted by mail. See Postal Rates, second page of cover. We specialize in Grass Seed of all kinds and for every purpose.

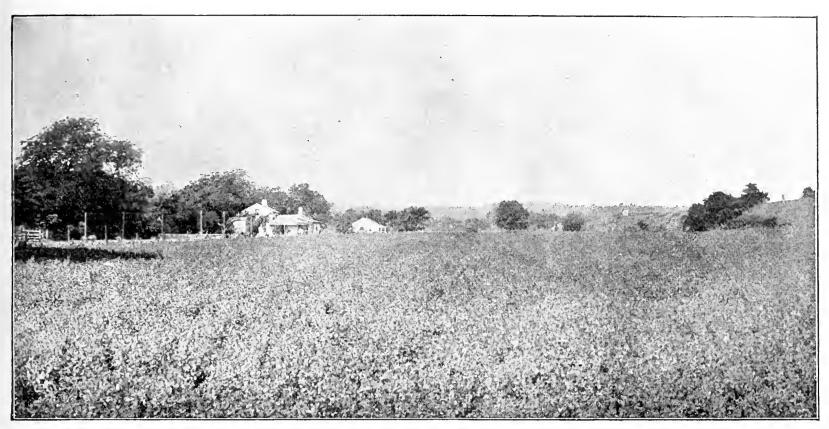
For larger quantities—write for special prices.

# McCULLOUGH'S HIGH-GRADE

SEED CLOVER

Where prices are given on Field Seeds

they only represent market values at time of going to press. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels, 60c each, extra. Postage must be added if wanted by mail.



View of a Field of Alfalfa Clover grown in territory contiguous to Cincinnati

# Alfalfa, or Lucerne (Medicago Sativa)

Alfalfa, or Lucerne (Medicago Sativa)

A LFALFA is one of the most profitable crops the dairyman or stock farmer can raise, due to the high yield of palatable hay which contains a large percentage of protein. Alfalfa as grown in the United States yields more than twice the digestable nutriments that Red Clover does and more than three times the digestable protein to the acre. Alfalfa and corn make a perfectly balanced ration. Many farmers are using it in their rotation to take the place of Red Clover. This practice is satisfactory where the soil contains a large supply of lime and organic matter and the seed has been inoculated, or the land has been in Alfalfa previously.

Alfalfa is best adapted to steep limestone hillsides and gravelly river bottoms, where the water can get away from the roots. Will grow on acid soils providing the water is drained off and sufficient lime is added to correct the acidity.

Seeding Alfalfa

The ground should be plowed in late Fall and worked in Spring once or twice to kill the weeds. If the land is acid it should be limed at the rate of three tons ground limestone to the acre. With a Wheat drill sow 20 to 25 lbs. of best grade non-irrigated inoculated Alfalfa seed with one bushel of 60 day Oats as a nurse crop to the acre any time between April 15th and May 10th. Apply 400 lbs. of a good high grade fertilizer, carrying a small per cent of ammonia and high per cent of phosphorus to the acre. If land is to be seeded following early potatoes, work ground up with disc and drag down. Sow seed the same as in Spring, omitting the Oats as a nurse crop. Where land is being seeded to Alfalfa for the first time it will pay to inoculate the seed with Edwards' Legume Bacteria for Alfalfa. The bacteria will be present and if there is not enough available nitrogen present they will gather the nitrogen from the air and supply your young plants, thus insuring a good stand.

We offer American grown seed raised in the Northwest and West on non-irrigated land. It is free as possible from noxious weeds. (60 lbs. per bushel.)

Per lb., 35c; 10 lbs., \$3.00.

## Grimm Alfalfa

This variety of Alfalfa is being raised all over the United States. It seems to be much heartier than common Alfalfa, which is due to the division of it's root system, enabling it to withstand freezing and thawing weather, droughts and other hardships which the common alfalfa will not endure.

To secure a stand the following requirements are essential—good seed bed, limestone soil, or addition of 3 tons of fine ground limestone per acre, inoculation of seed, and plenty of available plant food. Seed in the Spring or Fall of year at the rate of 15 to 20 lbs. per acre. Market Price.

Price on cheaper grades given on application

# Crimson, or Scarlet Clover

(Trifolium Incarnatum)

Crimson, Scarlet or Carnation Clover

mant but green state, makes a very early Spring growth and matures its seed and dies before

and matures its seed and dies before Summer. It makes little or no growth in very hot weather. Crimson Clover should be seeded shallow on a moist, reasonably fertile, well drained, well settled seed bed. Inoculation is essential when seeding the first time. Crimson Clover makes a good cover crop to be sowed on potato fields after the potatoes are dug. It makes a good growth in the Fall and early Spring and may be plowed under for potatoes the following Spring.

It may be seeded alone following any farm crop which ly Summer, so that

alone following any farm crop which can be removed from the land by early Summer, so that seed can be sown in late Summer or very early Fall. It may also be seeded for hay in mixture with grain, such as Wheat, Rye, Barley or Winter Oats, which are ready to cut for hay at about the same time as the Clover the following Spring.

Apply seed at the rate of 12 to 14 lbs. per acre.

Per lb., 25c; 10 lbs., \$2.25.



Price on cheaper grades given on application. For larger quantities—write for special prices.

# McCULLOUGH'S HIGH-GRADE CLOVER SEEDS—Continued

# Bokhara or Sweet Clover

SWEET Clover is a biennial plant, which closely resembles Alfalfa. It requires practically the same soil treatment as Alfalfa, but will grow under a wider variation of soil conditions than Alfalfa.

Three things are essential—lime, inoculation and scarified seed. If the land has raised Alfalfa previously, then the addition of lime may not be necessary. Inoculation with Edwards' Legume Bacteria tends to insure a stand, by securing nitrogen for the young plant at a time when it needs it the most. Scarified seed is seed that has been so treated as to scratch or crack the hard coating and make it easy for moisture to penetrate and hasten germination, thus insuring a stand.

When Sweet Clover is inoculated it gathers nitrogen from the air and stores it up in the soil for the use of future crops.

low Flowered. (Melilotus Officinalis.) Is a biennial producing seed the second year and will reseed itself if left undisturbed. It is the variety which is best adapted for hay, as it blossoms three weeks earlier than the White Sweet Clover, has a finer stem and does not grow so tall. It makes excellent pasture where 10 to 15 lbs. of seed is mixed with 6 lbs. of Timothy sowed in Wheat or Rye, then pastured in the Fall. The following Spring the Sweet Clover will be three weeks earlier than any other grass, thus making a fine early pasture. Yellow Flowered.

When sowing unhulled seed in the Fall with Wheat for hay, apply 10 to 15 lbs. per acre. Do not sow unhulled seed in the Spring and expect results the same year.

Yellow Flowered, Unbulled Seed.

Per lb., 25c; 10 lbs., \$2.25.

Yellow Flowered, Hulled Seed, Scarified.

Per lb., 35c; 10 lbs., \$3.00.

White Flowered. (Melilotus Alba.) Is a biennial producing seed the second year and will reseed itself if left undisturbed.

The White Sweet Clover is much coarser than the yellow, and is especially well adapted for soiling purposes. Many farmers are taking advantage of this crop in the bottoms where annual flooding prevents the use of Red Clover in a crop rotation, corn being planted year after year with an occasional crop of wheat. Scarified seed which has been inoculated is sown at the rate of 15 lbs. per acre in the corn at the last cultivation. This makes a growth of 10 to 15 inches by the time the corn is husked off of the stalk in the fall and is played and or late the fall winds. in the fall, and is plowed under late the following Spring

It is being widely used where farmers wish to It is being widely used where farmers wish to shorten their crop rotation and secure a crop of hay. To do this sow scarified seed which has been inoculated with Edwards' Legume Bacteria in the Wheat, from the middle of April to the 1st of May, at the rate of 15 lbs. per acre. The following September as much as one ton of hay per acre may be cut from this land and the next May the second growth may be turned under for corn. The Sweet Clover, being young and tender, rots early and forms a mulch which holds the water, thus making ideal conditions for a good corn water, thus making ideal conditions for a good corn crop. Mr. R. E. Simonds, of Miamitown, Ohio, won the Ohio State Championship in the 10 acre corn growing contest in 1917 with a yield of 102 bushels of corn per acre by practising this method. Farmers can increase their yield of corn from one-third to one-half by using Sweet Clayer as a green manufacture. by using Sweet Clover as a green manure crop.



Alsike or Swedish Clover

This variety is perennial and on account of its fibrous root system does not winter-kill. Will grow well on poor soil, and will do better on moist land than any other variety of Clover. It is a valuable acquisition to the forage plants of this country and is highly esteemed as pasturage for bees. Sow 6 to 8 lbs. per acre. Market Price.

# White or Dutch Clover

(Trifolium Repens)

# Red Clover—Medium

(Trifolium Pratense)

SOW 10 to 12 pounds to the acre, according to quality of seed used and condition of the soil. In ordering, always state quality desired, otherwise will send the best. Market Price.

# Japan Clover (Lespedeza Striata)

THIS Clover is especially adapted for the South because it occupies the same position in pasture mixtures for the South that White Clover does in the North. Will thrive on poor land, and as it grows thickly soon furnishes abundant on poor land, and as it grows thickly soon lurinshes abundant pasturage. Good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 10 to 12 lbs. per acre. This Clover is a half-hardy annual without any objectionable root system. Sow 15 to 20 lbs. per acre. (25 lbs. per bushel.)

Per lb., 45c; 10 lbs., \$4.00.

#### Red Clover—Sapling or Mammoth (Trifolium Pratense Perenne)

Also called English Clover, Cow Grass, Perennial Clover. Sow 10 to 12 lbs. per acre. Market Price. Perennial

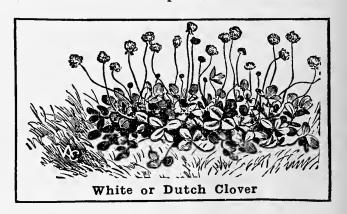
White Flowered. Unhulled Seed.

Per lb., 25c; 10 lbs., \$2.25.

White Flowered, Hulled Seed, Scarified. Per lb., 35c; 10 lbs., \$3.00.

Unhulled Seed of both varieties is very slow to germinate. Unhulled Seed (30 lbs. per bushel.) Hulled Seed (60 lbs. per bushel.)

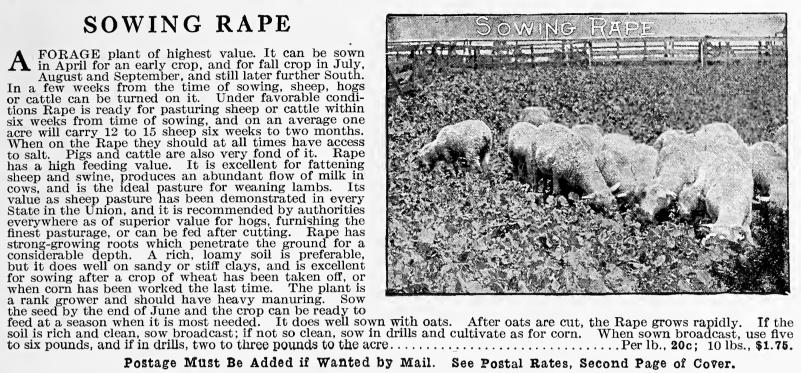
NOTE:—We have installed scarifying machinery, and our Hulled Sweet Clover is all scarified, which increases the germination 40 to 50 per cent.



# MISCELLANEOUS FARM SEEDS

The prices quoted are subject to market fluctuations. When customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please state quantities wanted when writing for prices.

### SOWING RAPE



Postage Must Be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## VETCHES OR TARES

THIS has been used in Europe for many years as a stock food and green manuring or cover crop. It does best if sown with rye, the latter gives it support and thus ensures enormous crops. It makes an ideal hay and it is a pity that every American farmer does not use it. It fertilizes the ground without further trouble or cost, on account of the free nitrogen it gathers from the air. It produces a peculiar vine plant with very narrow foliage and elongated flowers of pinkish white in clusters. The height when supported is frequently 4 feet.

Sand Hairy or Winter Vetch (Vicia Villosa) Our

The height when supported is frequently 4 feet.

Sand, Hairy, or Winter Vetch. (Vicia Villosa.) Our stock of this is the true type, which will absolutely live throughout the winter, and buyers should beware when buying that they procure the right article, which is a small, round, black seed; this is far superior to Crimson Clover, as it never winter-kills. Sow from August 1st to October 1st, broadcast, 1 to 1½ bushels per acre, to which we suggest adding half a bushel of winter rye or wheat. In the Spring it can be plowed in as green manure, or when in flower cut for hay. All stock relish it keenly. (60 lbs. per bushel.)

Short Crop—Market Price.

# SPELTZ OR EMMER

THIS grain resembles wheat but is a much larger yielder, producing frequently as high as 80 bushels of grain per acre, and that on the poorest land. The hay, if cut green is desirable for horse or cattle feed, while the straw after thrashing, is equal to the best wheat straw.

The heads are somewhat similar to two-rowed barley. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of any other grains. Cultivation similar to wheat or oats. Sow at the rate of 50 to 60 lbs. per acre. Market Price.

Barley

Sow 1½ to 2 bushels if drilled; 2 to 2½ bushels broadcast. Market Price.

# **Choice Seed Oats**

Broadcast 2 to 3 bushels to the acre.

Winter Turf. Perfectly hardy in the Southern and Middle States. Yields on good land, from 50 to 70 bushels to the acre of fine, heavy grain, weighing from 35 to 50 pounds to the measured bushel. Market Price.

White, Black and Mixed. Market Price.

#### SEED WHEAT AND SEED RYE

We are this season offering the following varieties of Seed Wheat. For detailed descriptions and cultural directions send for our special circular

# Poole Wheat

Is a bald smooth head, color of grain and chaff red, average height of plants 44 inches, straw stiff and stands up well on practically all kinds of soil. It is one of the best milling and baking wheats raised. It ripens in Southern Ohio average seasons about the 30th of June. Seed at the rate of two bushels per acre.

Portage Wheat

Is a pure line selection from the Poole. It has a smooth head, red chaff, and red kernel. It has given the highest yield at an average of 8 years of 28 varieties tested at the Ohio Experiment Station. Ripens in Southern Ohio about the 1st of July. Seed at the rate of two bushels per acre.

#### Fultz Wheat

Is a bald smooth wheat, red grain, white chaff, average height, 43 inches. Straw stiff and stands up well. It is well adapted to a wide variety of soil conditions and especially well adapted to level black land. Ripens in Southern Ohio average years, June 29th. Seed at the rate of two bushels per acre.

### Gladden Wheat

Is a pure line selection of the Gypsy wheat. It has a bearded head, smooth, grain red, chaff white. Stands up well and produces a good crop of straw. Is a vigorous grower and stands the freezing and thawing of the soils of Southern Ohio and does well on clay soils. Seed at the rate of 6 to 8 pecks per acre.

# Rosen Rye

This variety often produces as high as forty to forty-five bushels per acre, while 20 bushels per acre is a low yield. The average yield for common Rye is 15 bushels per acre.

Rosen Rye produces a strong, vigorous straw; the grain is large, plump, heavy and of good color. Owing to its vigorous stooling property, less seed is required, three to four pecks per acre proving sufficient.

# INCREASE YOUR YIELD OF ALFALFA, CLOVERS, VETCH,

and other Legumes by inoculating your seed with

# EDWARDS' LEGUME BACTERIA

A LL the requirements for successful inoculation are met in the cultures of EDWARDS' LEGUME BACTERIA.

These cultures are manufactured by the method originated and successfully followed for ten years at the Ontario Agricultural College and the stock cultures were secured from the Bacteriological Laboratory of that institution. There can, therefore, be no question as to their efficiency. They are prepared under the personal supervision of S. F. Edwards, formerly instructor in Bacteriology at the Michigan Agricultural College, Instructor in Bacteriology in the College of Medicine at the University of Michigan, and for nine and one-half years Professor of Bacteriology at the Ontario Agricultural College. The cultures are made according to the best principles of the science of Bacteriology, and special attention is given to keeping up the vigor and nitrogen-gathering power of the bacteria.

Cultures are made and kept in stock for legume crops as follows: Alfalfa, Sweet Clover, Red Clover, Alsike Clover, Crimson Clover, White Dutch Clover, Field or Garden Beans, Lima Beans, Soja Beans, Field or Garden Peas, Sweet Peas, Vetches, Cowpeas. Of this list the same

culture can be used for either Alfalfa or Sweet Clover, and likewise, the same culture can be used for Red, Alsike, Crimson and Dutch Clovers. All the other crops require a different culture for each as named. The entire culture may be used on less than the amount of seed for which it is made without harm to the seed. The cultures are good for six months after leaving the laboratory. The cultures are sent by mail or express prepaid, with full directions for use.

EDWARDS' LEGUME BACTERIA cultures are made in two sizes

in two sizes:

To inoculate 30 pounds of seed. \$0.60

To inoculate 60 pounds of seed. 1.20

To inoculate 300 pounds of seed. 5.00

Directions for use on each package.

In ordering, be sure to name crop to be inoculated.

These prices mean a very low cost per acre, the exact amount depending on the amount of seed sown. The cost is less than to pay freight rates on soil from a distance, or even to haul it from a neighbor's field for soil inoculation, and the labor is much less, as seed for several acres can be inoculated in a few minutes with the pure cultures,

# McCullough's High Grade Fertilizers

All Fertilizers Delivered Free on Board Cincinnati. Prices Subject to Change Without Notice.

### SHEEP MANURE—Pulverized

THIS is a natural manure; excellent for mixing with the soil. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth and a rich, green color. Use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden, spread over the surface and dig in. Being soluble, it readily makes a safe liquid manure—one pound to five gallons of water can be used. 1 lb. carton, 10c; 5 lbs., 25c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., \$2.50.

## PURE BONE MEAL

THIS is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 27%.

1 lb., 10c; 5 lbs., 35c; 10 lbs., 60c; 25 lbs., \$1.25; 50 lbs., \$2.00; per bag of 125 lbs., \$4.00.

VICTORY BRAND

Special Fertilizer for Garden Crops.

RAPID growth, early maturity, superior quality and large yields are essentials in all garden operations. Supply these by using Victory Brand Commercial Fertilizer. Apply at the rate of 200 to 400 lbs. per acre. Analysis: Ammonia, 2%; Total Phosphoric Acia, 10%; Potash (actual), 2%.

1 lb., 10c; 5 lbs., 40c; 12 lbs., 80c; 25 lbs., \$1.50; per bag of 125 lbs., \$5.00.

# EVR GREEN LAWN LIME

THE GRASS AND GARDEN TONIC

THIS lime is essentially a plant food, useful for correcting acid soils, also for binding sandy soils and loosening clay soils. Should be applied at the rate of 1,000 to 2,000 lbs. per acre for sandy soils and 2,000 to 3,000 lbs. per acre for clay soils, a few weeks before applying Commercial Fertilizers. Bag of 50 lbs., \$1.00; 2 bags (100 lbs.),\$1.75; 5 bags (250 lbs.), \$4.25; 10 bags (500 lbs.), \$8.00.

### NITRAPO

15% Nitrogen—15% Potash. All Available

Is CLEAN, sweet, odorless and contains no acids. The cheapest source of supply for Potash on the market. Used for all varieties of cultivated crops, also for Fruit Trees and small Fruits. Apply at the rate of 100 to 200 lbs. per acre, or may be mixed with other Commercial Fertilizers. 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.90; 25 lbs., \$4.00; 100 lbs., \$15.00.

# NITRATE OF SODA

CONTAINS about 16% nitrogen, equal to 20% ammonia. We recommend it as the cheapest and best form in which to apply nitrogen to plants.

1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.10; 25 lbs., \$2.50; 100 lbs., \$8.00.

EVR SWEET AGRICULTURAL LIMESTONE

Destroys Soil Acidity—Loosens Up Clay Soils—Tightens Up Sandy Soils

PUTS soils in better mechanical condition. Apply at the rate of 2,000 to 4,000 lbs. per acre, and may be applied at any season of the year.

Evr Sweet contains 87.97% Calcium Carbonate and 7.65% Magnesium Carbonate.

Evr Sweet is packed in 100 lb. bags.

Per bag of 100 lbs., \$1.25; 10 bags, (1,000 lbs.) \$8.00.

# HALF AND HALF

Is especially valuable for Field Crops, Potatoes and Grain. Should be applied at the rate of 400 to 500 lbs. per acre. Analysis: Ammonia, 2%; total phos. acid, 16%; potash K<sup>2</sup>O, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.90; per bag of 125 lbs., \$3.50.

# ACID PHOSPHATE 16%

SOME soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid. This must be supplied by the application of 16% Acid Phosphate. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%.

5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs., \$2.75.

# DRIED BLOOD MEAL

THIS is a splendid fertilizer for roses, carnations, chrysanthemums, etc., as well as for pot plants.
1 lb., 15c; 2 lbs., 25c; 25 lbs., \$2.60; 50 lbs., \$4.70;
100 lbs., \$8.85.

### LAND PLASTER

IF applied as a top dressing for grass or clover crops in the Spring, it greatly increases the growth and yield of same. 200 lb. bag.....\$2.75.

# HYDRATED LIME

3 lb. package, 10c; per bag of 50 lbs., 75c.

# EXCELSIOR PLANT FOOD

For Ferns and Other House Plants

A N odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers. It is immediately soluble in water, and available to plant life from the moment of application. Small package, 10c; medium size package, 20c; large package, 35c.

# Flardy Flerbaceous Perennial Plants

## FOR FALL PLANTING

THE steadily-increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For such of our customers who are not acquainted with the different varieties, we shall be pleased to make suitable selections of the most desirable species, that once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in Autumn.

Cannot accept orders for Hardy Perennial Plants totaling less than one dollar.

#### ACHILLEA (Sneezewort)

Boule De Neige. (Ball of Snow.) An improved variety, bearing pure white flowers of perfect form all Summer. Fine for cut flowers...... Each, 20c; per dozen, \$2.00.

Produces brilliant yellow heads (Parker's variety.) of flowers all Summer, with neat, finely-cut foliage.

Each, 25c; per dozen, \$2.50.

#### AGROSTEMMA (Rose Campion)

# AJUGA (Bugle)

Reptans Rubra. A fine plant for the rockery and for shady situations. Large spikes of purplish-blue flowers in May. Each, 25c; per dozen, \$2.50.

# ALYSSUM (Madwort)

Saxatile Compactum. (Basket of Gold, Gold Tuft, Rockmadwort.) A fine plant for the rockery or border, grows 1 foot high and produces broad flat heads of yellow flowers in May..... Each, 20c; per dozen, \$2.00.

### ANCHUSA ITALICA

Dropmore Variety. Remarkable for its free and continual, flowering all Summer and the beautiful gentian-blue of its flowers; grows about five feet high.

Each, 20c; per dozen, \$2.00.

Myosotidiflora. Grows 10 to 12 inches high, producing during April and May sprays of beautiful Forget-Me-Not-like flowers of rich blue.

Each, 35c; per dozen, \$3.50.

# ANTHEMIS TINCTORIA

The hardy Marguerites are among the most satisfactory summer-flowering perennials, growing about 15 inches. Large golden yellow flowers...Each, 20c; per dozen, \$2.00.

#### AQUILEGIA (Columbine)

CHARMING hardy plants, with distinct clear-cut foliage, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. They thrive well with ordinary garden culture, but do best in partially shaded nooks.

Characatha. (Goldon Columbina). Goldon yellow flow.

Chrysantha. (Golden Columbine.) Golden yellow flowers with long spurs.....Each, 20c; per dozen, \$2.00.

Chrysantha Alba. A long spurred white variety.

Each, 20c; per dozen, \$2.00.

Coerulea. Flowers often three inches in diameter; the outer sepals deep lilac or blue. petals white, the deep blue spur tipped green...Each, 20c; per dozen, \$2.00.

Lang Spurred Hybrids. Requifill varietions from the

Long Spurred Hybrids. Beautiful variations from the standard type......Each, 20c; per dozen, \$2.00.

Canadensis. (American Columbine.) A bright red and yellow variety, very attractive.

Each, 20c; per dozen, \$2.00.

### ARABIS (Rock Cress)

Alpina. A desirable early Spring flowering plant, adapted for edging and the rock garden, but does equally well in the border, forming a dense carpet, completely covered with pure white flowers, which last a long time in bloom.

Each, 25c; per dozen, \$2.50.

Alpina Flore Pleno. A distinct double white flowering form of the above.....Each, 25c; per dozen, \$2.50.



# ASCLEPIAS (Butterfly Weed)

Showy native plants about  $2\frac{1}{2}$  feet high, blooming during July and August.

Incarnata Rosea. (Swamp Milkweed.) Pretty rose-flesh colored flowers......Each, 20c; per dozen, \$2.00.

Tuberosa. Brilliant orange-colored flowers. Each, 20c; per dozen, \$2.00.

# ASTERS (Michaelmas Daisies or Starworts)

THESE are among the showiest of our late flowering hardy plants, giving a wealth of bloom at a season when most other hardy flowers are past, and for the best effect should be planted in masses of one color. The hardy sorts are entirely distinct from Annual Asters, being smaller in bloom but produced in greater quantity.

Beauty of Colwall. A grand semi-double flowering type of a beautiful lavender shade; height about four feet; September..........Each, 25c; per dozen, \$2.50.

Novi Belgii Climax. The plant is of strong vigorous habit, over 5 feet high, with pyramidical shaped flower stems filled with light lavender-blue flowers, each 1 1/4 inches or more in diameter. August to October.

Each, 25c; per dozen, \$2.50.

Novi-Belgii, St. Egwin. Handsome flowers of cherry pink. September and October. Each, 25c; per dozen, \$2.50.

Novae-Angliae. A tall growing species, bearing clear purple flowers; September.

Each, 20c; per dozen, \$2.00.

Novae-Angliae Roseus. rose-colored flowers. Similar to the preceding, bearing September.
Each, 20c; per dozen, \$2.00.

Novae-Angliae. Mrs. F. W. Raynor. Large, deep, crimson. September.....Each, 20c; per dozen, \$2.00.

Ptarmicoides. White flowers, produced in great masses, fine for cutting. July and August.

Each, 25c; per dozen, \$2.50.

# BAPTISIA (False Indigo)

tralis. Grows about 2 feet high with dark green, deeply-cut foliage and spikes of dark blue flowers in June......Each, 20c; per dozen, \$2.00. Australis.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

# HARDY HERBACEOUS PLANTS—Continued

# BOCCONIA (Plume Poppy)

data. A splendid plant, growing sometimes six feet high, bearing panicles of creamy-white flowers in July and August; makes a grand effect as a center in a hardy bed or a border background.

Each, 20c; per dozen, \$2.00. Cordata.

#### BOLTONIA (False Chamomile)

TALL growing, showy plants, with flowers resembling hardy Asters; appearing in September.

Asteroides. Pure white; five to six feet...Each, 20c; per dozen, \$2.00. Latisquama. Pink, tinted lavender, six feet..Each, 20c; per dozen, \$2.00.

## CAMPANULAS (Bell Flower)

BELL-SHAPED flowers, well known and easily grown, of much variety of form, some being tall and suitable for planting in borders or among shrubbery, while others are dwarf and suitable for edging, rockwork, etc.

Persicifolia. (Peach Bells.) Blue flowers during June and July; 2 feet. Each, 25c; per dozen, \$2.50.

Rotundifolia. (Scotch Hare Bells.) Very graceful drooping blue bells, rising from compact tuft of foliage; fine for rockery. June to August. Each, 20c; per dozen, \$2.00.

### CERASTIUM (Snow in Summer)

Tomentosum. Suitable for the rockery or for covering dry, sunny spots. Low growing plant with silvery foliage and white flowers in June. Each, 20c; per dozen, \$2.00.

# CHELONE (Shell Flower)

STATELY plants growing about two feet high and bearing numerous spikes of large flower-heads during the Summer and Fall.

Lyoni. Showy, purplish-red flowers......Each, 25c; per dozen, \$2.50.

### COREOPSIS

### DELPHINIUMS (Perennial Larkspur)

THESE are deservedly one of the most popular subjects in the hardy border, bold, attractive, and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment. Will begin blooming about the middle of June. If stalks are cut off as soon as flowers fade, they will continue blooming all Summer. (See cut.)

Belladonna Hybrids. The freest and most continuous blooming of all. The clear turquoise-blue flowers are not surpassed by any; 3 feet. Each, 20c; per dozen, \$2.00.

Belladonna Semi-plena. Clear blue flowers, overlaid with pink. 3 feet..... Each, 25c; per\_dozen, \$2.50.

Formosum. Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. 3 feet.

Each, 20c; per dozen, \$2.00.

Giant Hybrids. Unquestionably the finest strain of mixed hybrids ever offered. The original stock came from Europe, and consisted of the best-named varieties. The plants are of strong, vigorous habit, with large flowers on spikes two feet and over long, the majority running in the lighter shades of blue.

Each, 20c; per dozen, \$2.00.

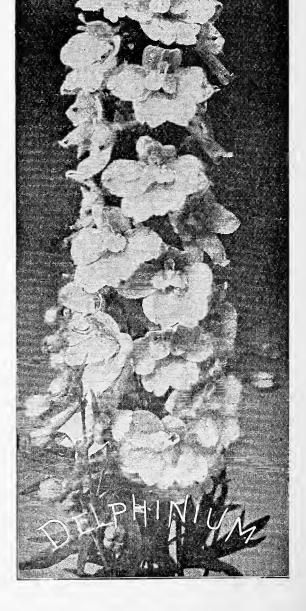
Chinensis. A pretty dwarf species, with fine feathery foliage and intense gentian-blue flowers in open panicles..... Each, 25c; per dozen, \$2.50.

Chinensis Alba. A pure white form of the above. Each, 25c; per dozen, \$2.50.

### EUPATORIUM

ratoides. (Thorough Wort.) A border plant of strong, free growth, 3 to 3 ½ feet high, with small white flowers in dense heads; splendid for cutting. August and September......Each, 25c; per dozen, \$2.50.

Coelestinum. Light blue flowers, similar to the Ageratum, blooms from August until frost.
Each, 25c; per dozen, \$2.50.



EUPHORBIA (Milk Wort)

Corollata. (Flowering Spurge.) Grows about 18 inches high, bearing from June to August umbels of pure white flowers with a small green eye; desirable for cutting.

Each, 25c; per dozen, \$2.50.

arissias. Grows 10 to 12 inches high with Cypress-like foliage and bears showy trusses of bright yellow flower-like bracts during May; very effective even when out of bloom..........Each, 25c; per dozen, \$2.50.

Undulata Variegata. Foliage green, striped with white. Each, 20c; per dozen, \$2.00.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

# HARDY HERBACEOUS PLANTS-Continued

# GAILLARDIA (Blanket Flower)

Grandiflora. Beginning to flower in June, they continue one mass of bloom the entire Summer. Flowers three inches in diameter: center dark reddish brown; petals orange to crimson. (See cut.) Each, 20c; per dozen, \$2.00.

# GYPSOPHILA (Baby's Breath)

DURING August and September the plant is a mass of delicate feathery blooms. These may be used as fresh cut flowers, also for a semi-everlasting effect.

Paniculata. Loose, feathery sprays of white flowers, making a mist-like effect; fine for bouquets. Each, 20c; per dozen, \$2.00.

Repens. An elegant trailing plant for the rockery, with clouds of small white flowers in July and August.

Each, 25c; per dozen, \$2.50.

# HELIANTHUS (Hardy Sunflower)

THE perennial Sunflower is very effective either in borders, among shrubbery, or as clumps on the lawn, etc. (See cut.)

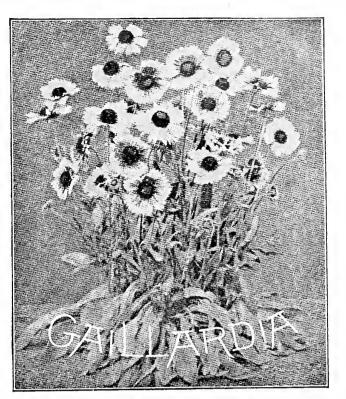
Maximiliana. Flowers in long, graceful sprays during October, when all others have finished flowering; five to even feet.

Each, 20c; per dozen, \$2.00.

Mollis. Large, single lemon-yellow flowers, with downy white foliage; blooms in August and September; four feet.
Each, 20c; per dozen, \$2.00.

parsifolious. A most gracefully formed single variety of large size, of a deep yellow color, on long stems; splendid for cutting; August to September; six to eight feet. Each, 20c; per dozen, \$2.00. Sparsifolious.





#### HELENIUM (Sneezewort)

THESE are desirable border plants, succeeding in any soil in a sunny location; useful for cutting.

Autumnale Superbum. Flowers are deeper yellow, separate and distirct from Riverton Beauty. Each, 20c; per dozen, \$2.00.

Riverton Beauty. Lemon-yellow. with large purplish-black cone. Each, 20c; per dozen, \$2.00.

Riverton Gem. Old gold changing to wall-flower red.....Each, 20c; per dozen, \$2.00.

## HELIOPSIS (Orange Sunflower)

Pitcheriana. Very similar to a small sunflower, but blooming earlier; deep golden yellow; all Summer, June till frost; three feet high. Each, 20c; per dozen, \$2.00.

ora Zinniaeflora. A new double flowering form of the Orange Sunflower, somewhat resembling a Zinnia in shape. Fine for cutting, July and August; two feet. Each, 25c; per dozen, \$2.50. Scabra Zinniaeflora.

#### HEMEROCALLIS (Yellow Day Lily)

Lily-like plants, which flower in greatest profusion during the Summer.

Aurantiaca Major. Grows two to three feet high and produces deep, orange-coloret flowers during June and July. . Each, 20c; per dozen, \$2.00.

Flava. The best known variety, very fragrant, deep lemon-yellow flowers 

Sovereign. Cup-shaped flowers; inside of petals light yellow, outside brown; blooms during July and August.......Each, 20c; per dozen, \$2.00.

Thunbergii. Bears rich, buttercup-yellow, funnel-shaped flowers in July and August...... Each, 20c; per dozen, \$2.00.

# HEUCHERA (Alum Root)

**F**OLIAGE remains close to the ground. During July and August, the graceful thin flower spikes, 2 feet high, appear in profusion.

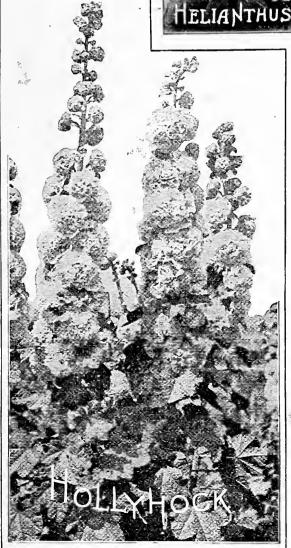
Sanguinea. Bright scarlet......Each, 20c; per dozen, \$2.00.

#### HIBISCUS (Mallow)

THESE are a mass of bloom during the entire Summer, when they produce large flowers in gorgeous colors.

Mallow Marvels, Giant-flowering. Flowers of enormous size, frequently 10 to 12 inches in diameter. Plants grow from 5 to 8 feet high, and bloom from early in July until late in Autumn. We offer three distinct colors—red, pink and white—strong roots. One each of the 3 colors for \$1.00. Each, 35c; per dozen, \$3.50.

We do not guarantee or replace plants, shrubs or trees at prices quoted.



# HARDY HERBACEOUS PLANTS—Continued



Japanese Iris

# HOLLYHOCK

FOR planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. They require rich, deep soil, well drained.

Newport Pink. Finest pure pink, double flowering variety.

Each, 25c; per dozen, \$2.50.

Double White, Double Rose, Double Yellow, Double Red, Double Mixed. Each, 20c; per dozen, \$2.00.

Single Red, Single Rose, Single Yellow, Single Mixed.

Each, 20c; per dozen, \$2.00.

#### IBERIS (Hardy Candytuft)

Sempervirens. Low-growing, with evergreen foliage. In Spring and early Summer, is completely covered with dense heads of pure white flowers. Each, 20c; per dozen, \$2.00.

### LIBERTY IRIS (Flag Iris)

The "Fleur-de-Lis" of France
"HE Liberty Iris is one of the most desirable May flowering plants. The flowers are of large size and of exquisite colors. For the best results plant in well-drained sunny colors. For the best results plant in well-drained sunny position, barely covering the roots. Avoid fresh manure in preparing your border.

Baron von Humboldt. Dark blue.

Canary Bird. Light yellow or buff.

Coerulea. Sky blue.

Florentina Alba. White.

Florentina Coerulea. Blue, very fine.

King of Yellows. Yellow.

Mme. Chereau. Pure white, border of blue.

Mont Blanc. Pure white.

Purpurascens. Dark purplish blue.

Queen Victoria. Blue, changing to bluish white.

Thorbecke. White and deep violet.

Price of above.....Each, 20c; per dozen, \$2.00.

If by mail, add 5c each, 50c per dozen.

We can furnish large clumps of most of the above varieties from 50c to \$1.00 each.

#### IRIS PALLIDA DALMATICA

This variety is of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender, shaded blue; exquisite in every way and fine for massing.

Each, 25c; per dozen, \$2.50.

## IRIS SIBERICA

Orientalis.

# JAPANESE IRIS (Iris Kaempferi)

THEY are most effective when planted in groups, and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July. (See cut.) We offer the following list of named sorts:

Azuma Yuki, No. 81. Petals rosy purple with heavy white veins, standards brownish-red, striped with white, yellow star center.

Banrai Nami, No. 1. Petals pale pinkish white with white standards and yellow center.

Furomon, No. 28. Petals bright pink, shading to creamy white, with heavy purple veins, standards purple, yellow center.

Kimino-Medmui, No. 97. Soft lilac, with dark purple veins and

purple standards.

Krishi-Ikari, No. 85. Petals brownish-red with light brown veins, center yellow, standards scarlet, striped with white.
Kyo-Dai-Yama, No. 59. Petals indigo, standards greenish blue, striped with white.

Okino-Kamone, No. 65. Petals recurved and creamy white, standards pure white.

Sassa No Koe, No. 34. Petals recurved and creamy white, veined pink and white, orange center, standards pure white, spotted deep pink.

Yezo-Nishiki, No. 16. Petals lavender, heavily spotted with dark purple, center yellow, standards lavender, bordered with purple.

Yodo No Kuruma, No. 8. Petals bright pink, shading to dark pink at center and heavily veined, standards purple, marbled with white.

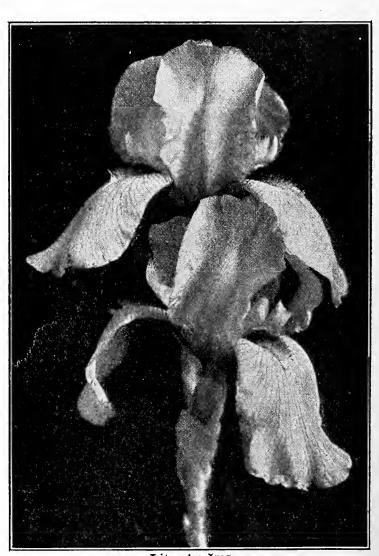
No. 66. Purple flowers with white spots; earliest to bloom. Above named varieties, each, 30c; per dozen, \$3.00. By mail, each, 35c; per dozen, \$3.50. Finest Mixed (Our selection). Each, 20c; per dozen, \$2.00. By mail, each, 25c; per dozen, \$2.50. We can furnish large clumps of most of the above varieties from \$1.00 to \$1.50 each.

# LIATRIS (Blazing Star, or Gay Feather)

MOST showy and attractive native plants, succeeding anywhere and producing their large spikes of flowers from July to September.

Pycnostachya. Spikes of light, rosy-purple flowers; five feet......Each, 20c; per dozen, \$2.00.

Spicata. Deep purple flowers, in spikes two to three feet high.....Each, 20c; per dozen, \$2.00.



Liberty Iris

We do not guarantee or replace plants, shrubs or trees at prices quoted.

#### HARDY HERBACEOUS PLANTS—Continued

#### LINUM (Flax)

enne. A fine plant for the border or rockery; grows 2 feet high, with light, graceful foliage and large blue flowers all summer....Each, 25c; per dozen, \$2.50. Perenne.

LUPINUS POLYPHYLLUS EFFECTIVE plants, producing large spikes of flowers. Will thrive in any good garden soil; grow about three feet high and bloom latter part of May and early June. Polyphyllus. Clear blue. Each, 20c; per dozen, \$2.00. Albus. A white variety of above. Each, 25c; dozen,\$2.50. Moerheimi. Its clean, bold growth always attracts attention. The spikes of flowers are frequently over a foot long, in color superb, being a combination of light and dark shades of pink, without a trace of magenta..........Each, 25c; per dozen, \$2.50.

#### LYCHNIS

Arkwrighti. Produces large circular flowers varying in color through crimson, scarlet, orange, salmon and intermediate shades; blooms all Summer and grows about 2½ feet high... Each, 50c; per dozen, \$5.00. Chalcedonica. A desirable plant, grows two to three feet high; flowers brilliant orange scarlet.

Each, 20c; per dozen, \$2.00. Viscaria Splendens. (Catch Fly.) Is a brilliant border plant, the flowers being produced in dense spikes.

Each, 20c; per dozen, \$2.00.

#### LYTHRUM

Roseum Superbum. (Rose Loose Strife.) A strong growing plant, three to four feet high, producing large spikes of rose colored flowers from July to September. Each, 20c; per dozen, \$2.00.

#### MERTENSIA (Blue Bells)

Virginica. An early spring-flowering plant, growing about one to one and one-half feet high, with drooping panicles of handsome, light blue flowers, fading to clear pink; one of the most interesting spring flowers, blooming in May and June...Each, 20c; per dozen, \$2.00.

#### MONARDA (Bergamot)

SHOWY plants, growing from two to three feet high, succeeding in any soil or position, with aromatic foliage, producing their bright flowers during July and August.

Didyma. (Oswego Tea.) Flowers bright scarlet.

Each, 20c; per dozen, \$2.00.



#### $M\ YOSOTIS \quad ({\tt Forget-Me-Not})$

Palustris Semperflorens. A variety that is hardly ever out of flower. Useful in a shady spot in the border. Each, 20c; per dozen, \$2.00.

Alpestris Robusta Grandiflora. The large spring-flowering Forget-Me-Not, with intense sky-blue flowers. Each, 20c; per dozen, \$2.09.

#### OENOTHERA (Evening Primrose)

ELEGANT subjects for growing in an exposed, sunny position, either in the border, or on the rockery, blooming all Summer.

Pilgrimi. Large clusters of bright yellow flowers.
Each, 20c; per dozen, \$2.00.

#### PENTSTEMON (Beard Tongue)

Barbatus Torreyi. Spikes of brilliant scarlet flowers from June to August. Grows 3 to 4 feet high. Each, 25c; per dozen, \$2.5c.

#### $PLATYCODON~^{(Balloon~Flower~or~}_{Japanese~Bell~Flower)}$

THE Platycodons are closely allied to the Campanulas, and form neat, branched bushes of upright habit.

Grandiflorum. Deep blue, cupped. star-shaped flowers, one and a half feet.... Each, 20c; per dozen, \$2.00.

Album. A white-flowered form of the above.

Each, 20c; per dozen, \$2.00.

Mariesi. Deep blue, bell-shaped flowers, nearly three inches across on one-foot-high plants.

Each, 20c; per dozen, \$2.00.

#### ${f POLEMONIUM}$ (Jacob's Ladder)

Reptans. Useful border plants, grows about 12 inches high, succeeds best in a partially shaded position; deep green, finely-cut foliage and spikes of showy blue flowers in May and June.....Each, 25c; per dozen, \$2.50.

#### PHLOX DIVARICATA CANADENSIS

This variety is worthy of extensive planting, as it commences to bloom early in April and continues through May, with large, fragrant lavender flowers, on stems 10 inches high...... Each, 20c; per dozen, \$2.00.

#### HARDY PHLOX (Phlox Decussata)

PROBABLY the most satisfactory of all perennials, and a good space, in proportion to the size of the garden, should always be given to these plants. These are justly esteemed as the finest herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden. (See cut.)

Africa. Brilliant carmine-red with deeper eye.

Baron Von Dedem. Blood-red scarlet. immense trusses.

Beranger. White ground, delicately shaded with pink and distinct red eye.

Beranger. red eye.

Bridesmaid. Pure white, with crimson-carmine eye.

Coquilecot. Bright orange-scarlet, with crimson eye; extra large compact flower heads.

Daubigny. Rosy purple, with enormous florets.

Eclaireur. Dark crimson, center rose, surrounded with white; an excellent variety.

an excellent variety.

an excellent variety.

a. Deep, fiery red; dark eye.

Von Lassburg. The finest white flowers; very large; strong,

Etna. Deep, nery rec., F. G. Von Lassburg. To vigorous grower.
Frau Anton Buchner.

\*he largest truss and property and property are also be largest truss.

vigorous grower.

Frau Anton Buchner. The finest white yet introduced, having the largest truss and individual flower.

Geo. A. Strohlein. Bright scarlet, with crimson red eye; large flowers, does not bleach.

Henry Murger. White, with crimson-carmine center; a beautiful

variety

Independence. An early, pure white.

Le Soleil. Bright china rose. dark rose center.

Mme. Paul Dutrie. Delicate lilac-rose, in shade like a soft pink Orchid; flowers very large, borne in immense panicles.

Miss Lingard. (Suffruticosa.) Pearly white, early and free.

Obergartner Wittig. Large, crimson-carmine flowers, vigorous

grower.

grower.

Pantheon. Bright carmine rose; large and fine.

R. P. Struthers. Bright rosy-carmine. with claret-red eye.

Richard Wallace. White, with bright crimson center, large flowers in immense panicles.

Rosenburg. Bright, reddish violet with blood-red eye; individual flowers large.

Selma. Large trusses of very large pink flowers, with cherry-red eye; choice.

Snowflake. Large flowering, pure white.

Thebaide. Salmon, with carmine eye, dwarf.

Wm. Robinson. Bright pink. Tall growing variety.

PRICE—Any of the above, each. 20c; per dozen, \$2.00.

If wanted by mail, add 5c each; 50c per dozen for postage.

#### HARDY HERBACEOUS PLANTS—Continued

#### PHLOX SUBULATA

(Moss, or Mountain Pink)

An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground, or covering graves.

Alba. Pure white. Rosea. Bright rose.

Each, 20c; per dozen, \$2.00.

#### PHYSOSTEGIA (False Dragon-Head)

One of the most beautiful of our mid-summer flow-ering *Perennials*, forming dense bushes three to four feet high, bearing spikes of delicate tubular flowers **not** unlike a gigantic heather. Virginica. Bright, soft pink. Each, 20c; per dozen, \$2.00. Virginica Alba. Pure white. Each, 20c; per dozen, \$2.00.

#### ORIENTAL POPPIES

(Papaver Orientale)

#### HARDY GARDEN PINKS

THESE old-fashioned favorites are absolutely perfect as an edging for the hardy border; as cut flowers they are indispensable.

are indispensable.

Her Majesty. A pleasing plant growing to about one foot and bearing large, snowy white flowers.

Each, 20c; per dozen, \$2.00.

White Reserve. A pure white variety, possessing a spicy fragrance.

Each, 20c; per dozen, \$2.00.

Mixed Hardy Garden Pinks. Seedlings grown from a very select strain, which should produce a good percentage of double flowers. Each, 20c; per dozen, \$2.00.

#### PYRETHRUM

THE large daisy-like blooms appear as early as June and continue in abundance continuously until September. They delight in a rich soil with a natural drainage. They thrive best in the full sunlight. As the flowers die, the old stems should be cut off to encourage new blooms. Hybridum F!. Pl. Double flowering, mixed.

Each, 20c; per dozen, \$2.00.

Hybridum, Single Flowering. In choicest mixture.

Each, 20c; per dozen, \$2.00.

Uliginosum. (Giant Daisy.) Grows four to five feet high, and is covered with large white daisy-like flowers three inches in diameter from July to September.

Each, 20c; per dozen, \$2.00.

#### PEONIA OFFICINALIS

THIS type is the real old-fashioned "Peony," and comes into bloom from ten days to two weeks ahead of the named sorts. All are strong growers, with large, full, named sorts. All are strong growers, with large, randouble, fragrant flowers.

Alba, blush-white; Rosea, rose; Rubra, crimson.

Each, 25c; per dozen, \$2.50.

#### Peonies—Japanese Single

THE single Peonies are even more beautiful than the double. They are larger in size of flowers and more delicate in coloring. No other plant flowering at the same season can vie with the Single Peony.

Mixed Colors.......Each, 30c; per dozen, \$3.00.



## DOUBLE HERBACEOUS

MAGNIFICENT, hardy plants, almost rivaling the rose in perfume, brilliancy, color and perfection of bloom. They are perfectly hardy, require little or no care, and produce larger or finer blooms when well established. (See

center; fragrant. .... Each, 40c.

Edulis Superba. Bright, mauve pink color mixed with lilac; fragrant. .... Each, 25c. lilac; fragrant.

Felix Crousse. Large, double, ball-shaped bloom; color brilliant red.

Each, 50c.

Festiva Maxima. White, with carmine tipped flakes to a few center petals.

Each, 40c. Floral Treasure. Large, full, clear pink, with lighter cen-

Tricolor Rosea. Dark violet rose; large globular flower.

Each, 40c. McCULLOUGH'S PEONY COLLECTION—one each of the above twenty named varieties for \$7.00, purchaser paying express charges.

We can supply large clumps of many varieties of Peonies from \$1.00 to \$1.50 each.

If to be sent by mail, add 5c each, 50c per dozen.

#### Peonies in Mixture

THEY are from our named varieties. We keep the colors separate and offer them to color as follows: White, red and pink in mixture. Each, 25c; per dozen, \$2.50.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

#### HARDY HERBACEOUS PLANTS (Continued)

RUDBECKIA (Cone Flower)

A VARIETY of these will furnish a supply of cut flowers from early July until September. They are extremely hardy, doing well with every one. They could be termed "a city garden perennial," doing so well with little attention. Golden Glow. Double canary yellow flowers, six feet; August......Each, 20c; per dozen, \$2.00.

Newmanni. Single dark orange, with deep purple cone center; three feet high; flowers from July to September.

Each, 20c; per dozen, \$2.00.

Purpurea. (Giant Purple Cone Flower.) The flowers remain in perfect condition on the plants for weeks at a time. In fact, we do not know of any other perennial where the flowers last so long in perfect condition. Flowers from July to September; two and a half feet high......Each, 20c; per dozen, \$2.00

#### SALVIA AZUREA

Azurea. Grows two to three feet high and produces pretty sky-blue flowers in great profusion during August and September..... Each, 25c; per dozen, \$2.50.

#### SCABIOSA

Caucasia. (Blue Bonnet.) Blooms from June to September. flowers a soft shade of lavender borne on stems 18 to 24 inches high......Each, 25c; per dozen, \$2.50. Japonica. They last a long time when picked and placed in water. Bears lavender-blue flowers on long stems from July to September.....Each, 25c; per dozen, \$2.50.

SEDUM (Stone Crop)

Acre. (Golden Moss.) Much used for covering graves; foliage green, flowers bright yellow.
Each, 20c; per dozen, \$2.00.

Album. Green foliage, white flowers.
Each, 20c; per dozen, \$2.00.

Sexangulare. Dark green foliage, yellow flowers.
Each, 20c; per dozen, \$2.00.

Spectabilis. Erect growing; height 18 inches with broad light-green foliage and immense heads of handsome, showy, rose colored flowers. Each, 20c; per doz., \$2.00.

Spectabilis Brilliant. Similar in growth to the above with bright, amaranth-red flowers. Each, 20c; per doz., \$2.00.

Spurium. Grows 6 inches high with attractive pink flowers.
Each, 20c; per dozen, \$2.00.

#### SHASTA DAISY

ARGE, snowy-white flowers, in bloom continuously throughout the Summer and Fall.

Alaska. A decided improvement on the original, very free-flowering, with blooms 4½ to 5 inches across, of pure, glistening white...Each, 20c; per dozen, \$2.00.

King Edward. Very large flowers; plant of vigorous growth......Each, 25c; per dozen, \$2.50.

SPIREA (Goat's Beard, Meadow Sweet)

Filipendula, fl. pl. (Double Flowered Drop-wort.) Pretty
fern-like foliage, with double white flowers on stems 15
inches high during June and July.

Each, 25c; per dozen, \$2.50.

Palmata Elegans. Pure white flowers with protruding
pink anthers during June and July; 3 feet.

Each, 25c; per dozen, \$2.50.

STATICE (Great Sea Lavender)

Latifolia. Immense heads, 2 to 3 feet across, small, blue flowers from June to September, which last for months if cut and dried......Each, 20c; per dozen, \$2.00.

#### STOKESIA (Cornflower Aster)

Cyanea. Produces showy, aster-like, deep blue flowers which measure from 4 to 5 inches across. 18 to 24 inches high, blooming freely from July until frost.

Each, 20c; per dozen, \$2.00.

Alba. White flowers and green foliage.

Each 20c; Per dozen, \$2.00.

#### SWEET WILLIAM (Dianthus Barbatus)

Well known hardy plant. We offer a superb strain of mixed single and double-flowering sorts.

Each. 20c; per dozen, \$2.00.

Newport Pink. Salmon or watermelon-pink flowers.

Each, 20c; per dozen, \$2.00.

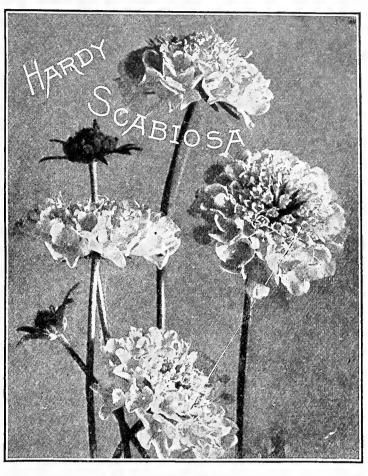
#### VALERIANA

Coccinea. Showy heads of reddish flowers, blooming from June to October. Height, 2 feet.

Each, 20c; per dozen, \$2.00.

Officinalis. (Hardy Garden Heliotrope.) Produces showy heads of rose-tinted white flowers during June and July, with strong heliotrope odor; 3 to 4 feet.

Each, 20c; per dozen, \$2.00.



#### VINCA MINOR

(Periwinkle or Trailing Myrtle)

Dwarf evergreen trailing plant, is used for carpeting the ground where it is too shady for other plants to thrive. Each, 20c; per dozen, \$2.60.

#### VERONICA (Speedwell)

Amethystina. Grows 2 feet high; bears amethyst-blue flowers in June and July. Each, 20c; per dozen, \$2.00. Incana. Bright silvery foliage, with spikes of amethyst-blue flowers 1 foot high during July and August.

Each, 20c; per dozen, \$2.00. Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire Summer and Fall. Each, 20c; per dozen, \$2.00. Spicata. An elegant border plant, growing about 1 ½ feet high, producing long spikes of bright blue flowers.

Each, 20c; per dozen, \$2.00. Virginica. Long spikes of white flowers in July and August; 3 to 4 feet..........Each, 20c; per dozen, \$2.00.

#### VIOLAS, or TUFTED PANSIES

(Viola Cornuta)

They flower continuously for nearly eight months in the year and while their flowers are not so large as those of the Pansy, their bright colors make them welcome additions to any garden.

Admiration. Soft purple, with dark blotch.

Lutea Splendens. Rich golden yellow.

Papilio. Violet, with dark eye; the most effective for massing.

White Perfection. A fine white.

Each of the above,, 15c; per dozen. \$1.50.

#### YUCCA FILAMENTOSA

(Adams's Needle)

A hardy ornamental foliage and evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are white, produced on long spikes.

Each. 20c; per dozen, \$2.00.

#### ORNAMENTAL GRASSES

CRNAMENTAL GRASSES

Erianthus Ravennae. (Plume Grass.) Grows six to eight feet high, and produces plumes in Fall.

Eulalia Gracillima. (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage. entirely green without variegation, except that the mid-rib is of a silver sheen.

Eulalia Japonica Variegata. Leaves striped white and green longitudinally.

Eulalia Zebrina. (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light.

Above, each, 25c; per doz., \$2.50; extra by mail, 10c each. Cannot accept orders for Hardy Perennial plants totaling less than One Dollar.

We do not guarantee or replace plants, shrubs or trees at prices quoted.

## Ornamental Flowering Shrubs

SHRUBS are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, and unless an immediate effect is wanted—in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf-growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

We can furnish Extra Strong Specimen Plants of most all sorts at \$1.00 to \$5.00 each.

We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

We do not guarantee to replace plants, shrubs or

trees at prices quoted.

ALTHEA. (Rose of Sharon.) The Altheas are among the most valuable of our hardy shrubs on account of their late season of blooming, which is from August to October. Are also extensively used as hedge plants.

Boule-De-Feu. Double red. Each, 50c; per dozen, \$5.00.

Jeanne D'Arc. Double white. Each, 50c; per dozen, \$5.00. Meehani. Variegated foliage with satiny, lavender colored, single flowers..... Each, 50c; per dozen, \$5.00.

Double Rose, White and Purple.
Three to four feet, each, 50c; per dozen, \$5.00. Three to four feet, each, 50c; per dozen, \$5.00.

BERBERIS THUNBERGII. (Japanese Barberry.) One of the most beautiful shrubs either for hedging or general purposes. It is of a neat, compact growth and the foliage is beautiful at all times; and in the Fall turns to a most brilliant crimson color. The plant is covered with bright scarlet berries all the Fall and Winter. It seldom grows over four feet high.

12 to 18 inches, per dozen, \$2.25; per 100, \$16.00.

18 to 24 inches, per dozen, 2.75; per 100, 20.00.

24 to 36 inches, per dozen, 3.60; per 100, 24.00.

BUDDLEYA. (Butterfly Shrub or Summer Lilac.) Variabilis Magnifica. Flowers are the shape and color of lilacs. Each, 25c; per dozen, \$2.50; clumps, each, 50c.

CALYCANTHUS FLORIDUS. (Sweet-Scented Shrub.)

Flowers fragrant, double and of a chocolate color.

Two to three feet, each, 25c; per dozen, \$2.50.

Three to four feet, each, 50c; per dozen, \$2.50.

CERCIS CANADENSIS. (Judas Tree or Red Bud.)
Five to six feet, each, \$1.00; per dozen, \$10.00.

CHIONANTHUS VIRGINICA. (White Fringe Tree.)
Two to three feet, each, 50c; per dozen, \$5.00.

CHESTNUT. (Horse Chestnut.) Dwarf. . Each, \$1.25. CORCHORUS. (Kerria.) Globe Flower or Japanese Rose. Japonica. Flowers bright yellow, large and showy. Two to three feet. Each, 30c; per dozen, \$3.00.

Japonica Flore Pleno. Double yellow blossoms.

Two to three feet. Each, 30c; per dozen, \$3.00.

A dwarf variety with small green nite. Two to three feet. Each, 30c; per dozen, \$3.00. Argentea Variegata. foliage, edged with white.

CORNUS FLORIDA. (White Flowering Dogwood.) Flow-

ers white and very showy.

Four to five feet. Each, \$1.00; per dozen, \$10.00.

CORNUS MASCULA. (Cornelian Cherry.) Bright yellow flowers.

Two to three feet. Each, 35c; per dozen, \$3.50.

CORYLUS PURPUREA. (Purple Leaved Filbert.)

Two to three feet. Each, 60c; per dozen, \$6.00.

DESMODIUM PENDULIFLORUM. Bears during Sep-

tember, sprays of rose-colored flowers.

Three to four feet. Each, 50c; per dozen, \$5.00.

DEUTZIA CRENATA FL. PL. Flowers double white,

tinged with pink.
Five to six feet. Each, 50c; per dozen, \$5.00.

DEUTZIA GRACILIS. A dwarf bush, with spikes of pure white flowers......Each, 30c; per dozen, \$3.00.

DEUTZIA LEMOINEII. Habit dwarf, flowers white.

Three to four feet. Each 50c; per dozen, \$5.00.

Large double

white flowers, slightly tinted with rose.

Three to four feet. Each, 50c; per dozen, \$5.00. ELDER GOLDEN.

OLDEN. (Sambucas.) Golden yellow foliage. Three to four feet. Each, 50c; per dozen, \$5.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

ELEAGNUS LONGIPES. Orange-scarlet berries.

Three to four feet. Each, 50c; per dozen, \$5.00.

EUONYMUS EUROPAEUS. (Burning Bush.)

Three to four feet. Each, 50c; per dozen, \$5.00.

EXOCHORDA GRANDIFLORA. (Pearl Bush.) White flowers. Three to four feet. Each, 50c; per dozen, \$5.00.

FORSYTHIA FORTUNEI. (Golden Bell.) Upright growth and bright yellow flowers in April.

Three to four feet. Each, 50c; per dozen, \$5.00.

FORSYTHIA SUSPENSA. (Weeping Golden Bell.) Willowy growth and yellow flowers.

Three to four feet. Each 50c; per dozen, \$5.00.

FORSYTHIA VIRIDISSIMA. (Golden Bell.) Erect growth and spreading branches; flowers bright yellow. Three to four feet. Each, 50c; per dozen, \$5.00.

HYDRANGEA PANICULATA GRANDIFLORA. flowers, which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks.

Two to three feet. Each 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

HYDRANGEA PANICULATA GRANDIFLORA.
Standard or Tree-Shaped Plants.
Three to four feet. Each, 75c; per dozen, \$7.50.
Four to five feet. Each, \$1.00; per dozen, \$10.00.

LILAC. Purple. (Syringa Vulgaris.) Purple flowers.
White. (Syringa Vulgaris Alba.) White flowers.
Two to three feet. Each, 30c; per dozen, \$3.00.
Three to four feet. Each, 50c; per dozen, \$5.00.

Price of any of the following named Tilege, fine plants.

Price of any of the following named Lilacs, fine plants

Each, \$1.00; extra strong.....each, \$1.50. Charles X. Reddish purple flower.
Ludwig Spaeth. Purplish-red flowers.
Madame Lemoine. Double white flowers.
Marie Legrave. Flowers pure white, extra.
Michael Buchner. Double pale lilac.

LONICERA TARTARICA. (Tartarian Honeysuckle.)
Two to three feet. Each, 30c; per dozen, \$3.00.

PHILADELPHUS OR SYRINGA. Grandiflorus. (Large-flowered Mock Orange.) Flowers are pure white and very large.

Five to six feet. Each, 50c; per dozen, \$5.00. RHODOTYPOS. (White Kerria.) Kerrioides.
Two to three feet. Each, 30c; per dozen, \$3.00.

RHUS COTINUS.

TINUS. (Purple Fringe, or Smoke Tree.)
Three to four feet. Each, 50c; per dozen, \$5.00.
TREUM. (Golden Currant.) Yellow flowers.
Three to four feet. Each, 50c; per dozen, \$5.00. RIBES AUREUM.

Anthony Waterer. Rose red flowers.

12 to 18 inches. Each, 30c; per dozen, \$3.00.

18 to 24 inches. Each, 50c; per dozen, \$5.00.

Alba. Adwarf, bushy, white flowering variety.

18 to 24 inches. Each, 30c; per dozen, \$3.00. SPIREA.

Callosa Alba. Houttei. (Improved Bridal Wreath.) Clusters of

white florets are set close along the drooping stems.

Two to three feet. Each, 25c; per dozen, \$2.50.

Three to four feet. Each, 50c; per dozen, \$5.00.

Reevesii Fl. Pl. Large double, pure white flowers.

Three to four feet. Each, 50c; per dozen, \$5.00.

SYMPHORICARPUS. Vulgaris. (Coral-Berry or Indian Currant.).....Two to three feet. Each, 30c.

VIBURNUM. (Snowballs and High Bush Cranberry.)

Opulus. (High Bush Cranberry.) White flowers.)

Two to three feet. Each, 30c; per dozen, \$3.00.

Three to four feet. Each, 50c; per dozen, \$5.00.

Opulus Sterilis. (Guilder Rose or Snowball.) Single

Three to four feet. Each, 50c; per dozen, \$5.00. m. (Japan Snowball.) Pure white flowers. Two to three feet. Each, 35c; per dozen, \$3.50. A. Eva Rathke. The finest Weigelia in culti-

WEIGELIA. Eva Rathke. The finest Weigelia in cultivation. Flowers are a rich, ruby carmine.

18 to 24 inches. Each, 30c; per dozen, \$3.00.
Two to three feet. Each, 50c; per dozen, \$5.00.

Rosea. A beautiful shrub, with rose-colored flowers.
Two to three feet. Each, 30c; per dozen, \$3.00.
Four to five feet. Each, 50c; per dozen, \$3.00.
Rosea Nana Variegata. Flowers delicate rose and pink. Two to three feet. Each, 50c; per dozen, \$5.00.

#### ORNAMENTAL TREES

## Flardy Flybrid Perpetual Roses

A MONG all the hardy plants few are so commonly well liked or more valuable than the roses, particularly the "June Roses," as the Hybrid Perpetuals are called. They are strong growers, bearing large globular flowers, and are so hardy that they succeed in any locality. The severest winters will not kill them, but it is generally conceded that protection is beneficial when the straw, manure, corn-stalks or other covering is not so thick as to be unnatural and smother them.

Hardy Hybrid Perpetual Roses should be planted in the Fall, because dormant stock for Spring delivery is unsatisfactory on account of being carried in storage cellars all winter. For this reason we have discontinued making Spring deliveries on Hardy Perpetual and Hardy Climbing Roses.



#### **HEDGEPLANTS**

CALIFORNIA PRIVET. trum Ovalifolium.) Its foliage is a rich dark-green, and is nearly evergreen, remaining on plant until mid-winter. It the It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 to 15 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

18 to 24 inches, 75c per dozen; **\$4.00** per 100.

24 to 36 inches, \$1.00 per dozen; **\$6.00** per 100.

Extra Large Bushy Plants, \$1.50 per dozen; \$10.00 per 100.

Strong Two-Year-Old Plants Ready for Delivery During October and November.

e—Extra Strong Plants, each, 75c; per dozen, \$7.50. Sent by express at customer's expense.

If wanted by mail, add 10c each, 75c per dozen, for postage.

Captain Christy. Delicate flesh pink, very free.

Eugene Furst. Flowers velvety crimson with maroon shading.

Frau Karl Druschki. An exquisite flower of the purest white.

General Jacque minot. The old favorite; velvety crimson.

John Hopper. Brilliant crimson, large flowers, remarkable for their fragrance.

Mme. Plantier. Pure white, large and double, free bloomer, fine for cemetery planting.

Magna Charta. Deep pink, large sweet scented and of fine form; one of the hardiest.

rsnall P. Wilder. A grand rose of large full flowers of a bright carmine red. Marshall P. Wilder.

Mrs. John Ling. Large beautiful pink blooms, borne on long sturdy stems.

Paul Neyron. An immense rose of a deep rose color.

Prince C. De Rohan. (The Black Rose.) crimson passing to intense maroon. Deep velvety

Ulrich Brunner. Cherry crimson, large fine form, strong grower and hardy.

#### Hardy Climbing Roses

We Offer the Best and Most Distinct Varieties.

PRICE—Strong 2-Year-Old Dormant Stock for Fall Planting, each, 75c; per dozen, \$7.50. By Express at Purchaser's Expense.

American Pillar. Color is a delightful shade of pink.

Crimson Rambler. Bright crimson flowers.

Dorothy Perkins. Beautiful shell pink flowers.

Dr. W. Van Fleet. Rich, flesh-pink flowers.

Flower of Fairfield. Large trusses of crimson flowers. Hiawatha. Brilliant, ruby-carmine flowers.

Philadelphia Rambler. Deep crimson flowers.

Lady Gay. A delicate cherry pink.

Silver Moon. Large pure white flowers.

Tausendschon. Beautiful soft pink flowers.

Gardenia. (Wichuriana) Flowers cream color.

Veilchenblau. (Blue Rambler.) Bluish flowers.

#### HARDY CLIMBING PLANTS

AMPELOPSIS VEITCHII. (Japan Creeper or Boston Ivy.) Best climbing plant for covering brick or Ivy.) Best walls.

Each, 50c; per dozen, \$5.00; by mail, each, 55c.

AMPELOPSIS QUINQUEFOLIA. (Virginia Creeper.)
For covering walls, verandas and trunks of trees.
Each, 50c; per dozen, \$5.00; by mail, each, 55c.

BIGNONIA RADICANS. (Trumpet Vine.) trumpet-shaped. bright scarlet. Each, 25c; per dozen, \$2.50; by mail, each, 30c.

#### CLEMATIS (Small Flowering)

Paniculata. (Japanese Clematis.) Pure white, very fragrant, borne in large clusters; small flowering. Each, 50c; per dozen, \$5.00; by mail, each, 55c.

#### EUONYMUS RADICANS

This vine is especially adapted for covering low foundation walls. Has deep evergreen foliage and is extremely hardy. Can also be used as an edging plant as it may be clipped same as boxwood. Each, 50c; per dozen, \$5.00.

#### HONEYSUCKLES

Each, 35c; per dozen, \$3.50; by mail, each, 40c.

Aurea Reticulata. Foliage variegated yellow and green. with yellowish white, fragrant flowers.

Monthly Fragrant or Dutch. Blooms all Summer.

Common Woodbine. A strong, rapid grower; flowers red outside, buff within.

Halleana. Nearly evergreen; flowers pure white. Scarlet Trumpet. Scarlet inodorous flowers.

IVY, English. Beautiful, evergreen vine. Each, 50c; per dozen, \$5.00; by mail, each, 55c.

MATRIMONY VINE. The branches may be trained over fences or trellises.

Each, 35c; per dozen, \$3.50; by mail, each, 40c.

IS HETEROPHYLLA VARIEGATA. Dark green foliage, variegated with white and pink.

Each, 30c to \$1.00.

WISTARIA, CHINESE. Delicate, violet blue blossoms. Each, 60c; per dozen, \$6.00; by mail, each, 65c.

WISTARIA, CHINESE, WHITE. Pure white flowers. Each, 60c; per dozen, \$6.00; by mail, each, 65c.

We do not guarantee or replace plants, shrubs or trees at prices quoted. Page 33

## Fruit Grees

SELECT thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots, and setting the trees therein, carefully pack the earth about the roots.

By Express or Freight at Expense of Purchaser.

We do not guarantee or replace Trees or Shrubs at prices quoted.

While we make no charge for packing or delivery to freight or express offices here, still on account of increased cost of operation we cannot accept orders for Fruit Trees in smaller quantities than six, either straight or assorted, at prices quoted. In smaller quantities, add 15c per tree or make up a Club Order among your friends that can be shipped to one address.

### APPLES, STANDARD

5 to 7 feet high. Each, \$1.00; per dozen, \$10.00. SUMMER VARIETIES

ly Harvest. (Early June, Yellow Harvest). Fruit is medium size to large, the skin tender, very smooth, clear, pale, waxen yellow; flesh is white, rather fine, crisp, tender, juicy, at first briskly sub-acid, but eventually becoming milder and more agreeable for dessert. Ripens in July and August.

I Astrachan. Fruit of good medium size; yellow, largely covered with red, presenting a striped appearance; flesh white, often strongly tinged with red, crisp, tender, juicy, sub-acid and of good quality. One of the most beautiful early market apples. Ripens in August. Early Harvest.

August.

August.

White Transparent. Grand Sultan). The tree is an upright grower and usually bears fruit the next year after planting. Fruit of medium size, pale, waxen yellow, pleasantly acid, tender and good, splendid for home and market. Ripens in July and August, before Early Harvest. Yellow

## APPLES, STANDARD

5 to 7 feet high. Each, \$1.00; per dozen, \$10.00. **AUTUMN VARIETIES** 

Delicious. This is probably the best of the newer varieties, having been satisfactorily tested in many parts of the country. Fruit is brilliant dard red, shading to yellow at the blossom end. Flesh is crisp, fine grained and quite juicy; flavor slightly acid but very pleasing.

Duchess of Oldenburg or Duchess. A variety of great hardiness, yielding abundantly in all sections. Fruits are large, rounded, yellow, striped red, tender, juicy and of the best quality for cooking.

Fall Rambo. Fruit mottled and striped red and yellow, of medium size and good flavor; widely cultivated and highly esteemed for eating. Tree is a strong grower and heavy bearer.

and heavy bearer.

Maiden's Blush. Fruit of uniformly good size, smooth, round, beautifully flushed with brilliant red on a yellow ground. Good for table use. One of the most beautiful and productive Fall varieties. Ripens in August

## APPLES, STANDARD

5 to 7 feet high. Each, \$1.00; per dozen, \$10.00. WINTER VARIETIES

Baldwin. A great market apple, very productive; fruit large, deep red, crisp, juicy and rich. December to

March.

ana. The fruit is large, clear, pale yellow with pinkishred blush; flesh is tender and aromatic with a suggestion of banana flavor. November to February.

#### WINTER VARIETIES—Continued

Davis. (New York Pippin.) A remarkable keeper and profitable market apple in many sections. Large, handsome, brightly striped with red, variable in flavor. Remarkably vigorous and fruitful. January to April. Ben Davis.

Gano. Similar but superior to the Ben Davis, bearing a handsome and better quality of fruit that is large and dark red. Flesh is pale yellow, sub-acid, of good flavor and good keeping qualities. Very productive. December to March.

Grimes Golden. Fruit medium to large of transparent golden yellow and of best quality. Flesh tender, juicy, spicy and rich. November to February.

Jonathan. Fruit is medium sized, pale yellow, heavily flushed with red; the flesh is white, juicy, tender and mild sub-acid. Excellent quality. November to March.

Northern Spy. Fruit large, striped crimson in the sun; juicy, rich and aromatic, retaining these qualities until late Spring or Summer. Valuable as an Aphis-resisting sort. January to June.

Rome Beauty. (Royal Red, Rome, Phoenix). The fruit is large and handsome, yellow with crimson cheek, tender, juicy, with yellow flesh; uniform in size, fine in appearance and of good quality. November to Febru-

Stayman's Winesap. Fruit medium size, mostly covered with red on a yellow ground; flesh fine, crisp, juicy, very tender and highly flavored. November to April, but will keep until May. A favorite apple for cider.

Winesap. Fruit medium large, skin almost entirely covered with dark red; flesh yellow, crisp, with a rich flavor. December to March.

York Imperial. (Johnson's Fine Winter, Shepp). Fruit medium size, attractive, smooth, clear, waxen yellow, flushed with carmine. The flesh is crisp, firm, sub-acid and retains its flavor to the last. December to Febru-

### CRAB APPLES

5 to 7 feet. Each, \$1.00; per dozen, \$10.00.

RAB Apples do well on almost all soils. Trees are hardy and vigorous; come into bearing early and bear almost every year. Excellent for cider, vinegar and jelly.

Hyslop. Bears large crimson fruit in clusters. October. Transcendent. Largest and best of the Siberian Crabs.

Tree is extremely hardy, good grower and usually very productive. Fruit is bright yellow, striped with red and one and one-half to two inches in diameter. Flesh is crisp, juicy and sub-acid. August and September.

Whitney. Tree is a hardy, thrifty, upright grower; comes into bearing young and is very productive. Fruit is green, spotted with carmine. Flesh yellowish, crisp, juicy, splendid for eating and cider. August and juicy, splei September.

Yellow Siberian. Color of fruit is amber with red blush and of medium size. September.

#### SUITABLE DISTANCES FOR PLANTING FRUIT TREES.

Apples, standard, 30 to 40 feet. Pears, standard, 18 to 20 feet. Peaches, 16 to 18 to 20 feet. Cherries, sour, 15 to 18 feet. Plums, 16 to 20 feet. Quinces, 10 to 12 feet. Peaches, 16 to 18 feet. Cherries, sweet, We do not guarantee or replace plants, shrubs or trees at prices quoted.

#### FRUIT TREES, Continued

#### CHERRIES

HEART AND BIGARREAU (Sweet)

5 to 7 feet, first-class, each \$1.20; per doz., \$12.00

No home orchard is complete without some cherry trees.

They are easily grown wherever the apple succeeds and they bear good crops yearly.

Black Tartarian. A beautiful purplish cherry of large size and superb quality, rich and juicy. Late June and

July

July.

Governor Wood. One of the finest sweet cherries. Fruit is large, light red, juicy and delicious. Tree is healthy and productive. June.

Napoleon. Fruit of large size, white with red cheeks, firm and juicy. One of the best. Early July.

Rockport Bigarreau. Fruit large, round, light red, flesh firm and of fine flavor. Late June.

Yellow Spanish. A large handsome sweet cherry; yellow with light red cheek, firm and delicious. Late June.

DIKE AND MORELLO (Sour)

DUKE AND MORELLO (Sour) 4 to 6 feet, first-class, each, \$1.20; per doz., \$12.00.

Dyehouse. One of the earliest cherries. Similar to the Early Richmond but ripens about a week earlier and is much sweeter. The fruit is medium sized, soft, red and juicy. Tree is hardy and very productive. June. Early Richmond or May. Unsurpassed for cooking. The tree is a free grower and reliable producer. The fruit is medium size, dark red, juicy and has an acid flavor.

June.

English Morello. Fruit is large, dark red, nearly black, rich, juicy, with acid flavor. Tree is of dwarf growth. Late July.

Windsor. A large, delicious cherry; reddish-brown or liver colored. Valuable for late market or home use.

#### MULBERRIES

5 to 6 feet, each \$1.25; per doz., \$12.50.

Downing's Everbearing. One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits; hardy.

#### PEARS STANDARD AND DWARF

6 to 7 feet, first-class, each, \$1.00; per doz., \$10.00.

Bartlett. One of the most popular sorts, both for home and market. It is large, handsome, waxy yellow with red blush, flesh buttery, rich, juicy and highly flavored. August and September.

Duchess D'Angouleme. The skin is a dull greenish-yellow; flesh white, melting, juicy and well flavored. Tree is a vigorous grower. October and November. Flemish Beauty. The fruit is large, the skin pale yellow; the flavor is sweet and melting. September and October.

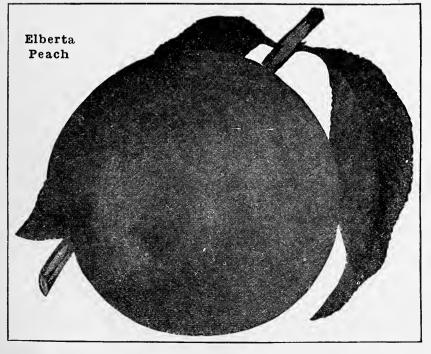
Kieffer's Hybrid Large rich calculated.

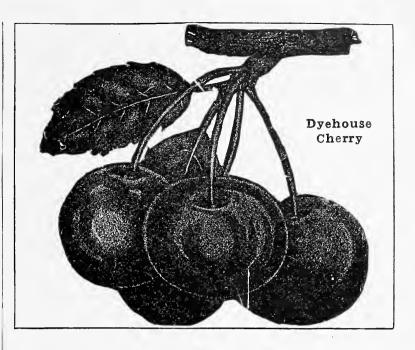
Kieffer's Hybrid. Large, rich color and good quality. Fine for canning and preserving. October and November.

vember.

Seckel. Small, yellowish brown, of rich, delicious flavor, very popular for dessert. August and September.

Sheldon. Of the finest quality, rich and aromatic. Fruit is greenish russet with a red cheek, large size and somewhat flattened shape. September.





#### PEACHES

4 to 6 feet, each, 90c; per doz., \$9.00.

IF living on a farm, plant a small peach orchard for home use or a larger one for commercial purposes. If living

Through the farm, blant a small peach orchard for home use or a larger one for commercial purposes. If living on a city lot plant a peach tree in the back yard.

Champion. One of the finest freestone peaches. Large, creamy-white with slight blush. Flesh white, rich, sweet, juicy and of excellent flavor. August.

Crawford's Early. A very large, rich, yellow freestone of the finest quality. Late August.

Crawford's Late. This peach is similar to Crawford's Early, but ripens two or three weeks later. Freestone. Late September.

Elberta. The fruit is large with golden-yellow skin covered largely with crimson; flesh is yellow, firm, juicy and of high quality, very prolific. Freestone. September.

Heath Cling. Fruit very large, creamy white with faint blush. Flesh white to the stone, juicy and sweet with a good aroma. October.

Old Mixon Free. The standard late white peach. A large tender freestone with tender, excellent white flesh. September.

#### PLUMS

#### STANDARD ON PLUM STOCKS

5 to 7 feet, each, \$1.20; per doz., \$12.00.

Plum trees require but little room to grow and are pro-ic bearers. For dessert, cooking and canning the demand lific bearers. For de is almost unlimited.

Abundance. Large, beautiful yellow, heavily overspread with purple-carmine. Flesh yellow, juicy,
sweet, firm, with tough skin. July.

Bradshaw. Very large, dark violet red; flesh yellow,
juicy and good. Tree an erect, vigorous grower.
Middle of August.

Burbank. Fruit very large, color cherry red, mottled; flesh yellow, sweet and firm. Hardy and vigorous grower. August.

Lombard. A favorite for canning. Fruit is medium size, oval and violet red. Flesh is yellow, juicy, pleasant and good. Late August.

June. An early ripening plum of good quality. Fruit medium to large, purplish-red; fiesh yellow, solid, juicy and of good quality. Early August. Red June.

Shippers Pride. Large, showy, dark purple fruit. The flesh is sweet and firm. September.
Yellow Egg. A beautiful yellow, egg-shaped plum of large size; flesh yellow. Excellent for canning. Late August.

#### OUINCES

4 to 5 feet, each, 99c; per doz., \$9.00.

Apple or Orange. Large, round, bright golden yellow, cooks quite tender and has an excellent flavor. Valuable for preserving and for market. An abundant bearer dant bearer.

**Champion.** The fruit is large, oval, of a rich color and excellent quality. Ripens late and keeps well until

We do not guarantee or replace Trees or Shrubs at prices quoted.

#### BLACKBERRIES, CURRANTS, GOOSEBERRIES AND RASPBERRIES

By Express or Freight at Expense of Purchaser.

Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

#### BLACKBERRIES

Per dozen, 75c; per 100, \$5.00.

THE Blackberry is one of the most profitable fruits to grow when properly managed as it thrives well in almost any soil, but reaches perfection in a strong loam tending towards clay.

Ancient Briton. Large berries of

fine quality.

Blower. Large berries. Very productive.

ductive.

Early Harvest. Fruit, medium size.
The first to ripen.

Eldorado. Large fruit, fine quality, good keeper.

Mersereau. Berries large; good keeper and shipper.

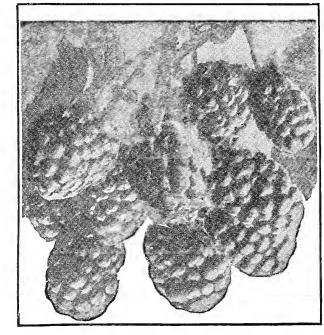
Rathbun. Fruit, very large, sweet and luscious.

Snyder Medium size: sweet and

Snyder. Medium size; sweet and

Taylor. Medium size fruit of fine flavor; ripens late.

Ward. Fine, large fruit of excellent quality, hardy.



#### CURRANTS

Two-Year-Old Plants

COOL, moist soil is best adapted to the growth of currants. They should be well cultivated and heavily mulched.

heavily mulched.

Cherry. Large, bright red berries with a thin skin and fine flavor.

Each, 35c; per dozen, \$3.50.

Champion. This is one of the best black currants; fruit is above medium size with fine flavor.

Each, 35c; per dozen, \$3.50.

Perfection. Color of fruit is a beautiful bright red, of large size and a rich, mild, sub-acid flavor.

Each, 35c; per dozen, \$3.50.

White Grape. The golden-white berries are borne is large, handsome clusters and have a mild, sub-acid flavor. Each, 35c; per dozen, \$3.50.

#### DEWBERRY

Lucretia. One of the low-growing, trailing blackberries. It has proved highly satisfactory where-ever tried, and many say it is the best of all the blackberry family. Per dozen, 75c; per 100, \$5.00.

#### GOOSEBERRIES

Two-Year-Old Plants

ONE of the hardiest of the bush fruits. The best results are obtained by planting in moist clay loam.

Downing. Large, pale green and of splendid quality for both cooking and table use.

Each, 35c; per dozen, \$3.50.

Houghton's. Small to medium; rounder, oval, pale red, sweet,

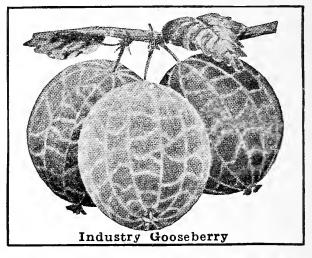
tender. Each, 35c; per dozen, \$3.50.

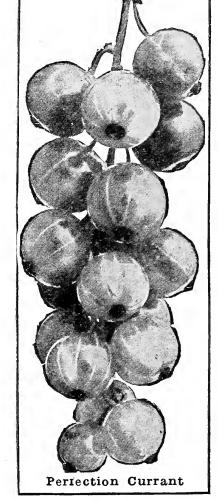
Industry. The best English varicty yet introduced. Berries large, dark red color when ripe.

Each, 40c; per dozen, \$4.00.

Smith's Improved. Large, pale greenish yellow, skin thin, of excellent quality.

Each, 35c; per dozen, \$3.50.

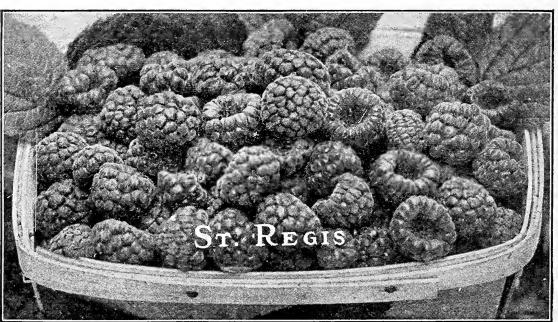




#### RASPBERRIES

Once the raspberry patch is established it requires very little cultivation. They thrive in good, moist soil. Black caps should be planted in the spring.

St. Regis. It is wonderfully prolific, the first or main crop being far greater than that of any other red variety known. It fruits on the old canes in generous quantities until late in August. By that date, berries begin to ripen upon the young canes, which continue to produce berries in increasing numbers until severe frost. The berries are a bright crimson, of large size and surpassing quality—rich, sugary with full raspberry flavor. They are of exceedingly meaty, firm texture and keep in good condition longer after being gathered than any other red raspberry..Per dozen, \$1.00; Per 100, \$7.00



The following varieties are all, per doz., 75c; per 100, \$5.00.

dinal. Considered one of the very best purple berries, as they produce a fine quality of dark red or almost purple berries through a long season. Cardinal.

Cumberland. The largest black cap.

Cuthbert. Large, firm, deep rich crimson.

Gregg. A large black cap variety, fruit firm. Kansas. The hardiest black cap; strong vigorous.

#### STRAWBERRIES AND GRAPE VINES

By Express or Freight at Expense of Purchaser.

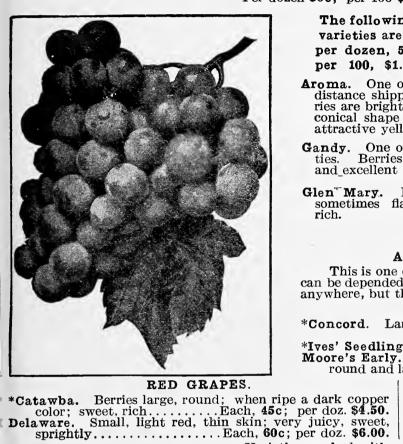
Impossible to Accept Orders for Small Fruits Totaling Less than One Dollar.

#### STRAWBERRIES

Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out.

them out.

Superb. The Ever-bearing Strawberry—Suberb is a truly wonderful, fall-bearing variety, and what makes it unusually profitable is the fact that it also produces a heavy yield of choice fruit in the early summer, along with the standard varieties. They continue to give large yields of choice berries throughout August, September and in October up to the time the ground is slightly frozen. Plants of this variety which are set in the Spring should have the blossoms removed until the first of July. The remainder of the blossoms may be left to develop into berries, and a good crop of fruit will thus be secured the same season the plants are set, without injury to the plants Per dozen 50c; per 100 \$2.50.

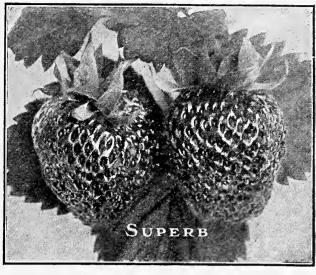


The following varieties are all, per dozen, 50c; per 100, \$1.50.

roma. One of the finest for long-distance shipping. The large ber-ries are bright red to the center, of conical shape with prominent and Aroma. attractive yellow seeds.

Gandy. One of the best late varieties. Berries large, of fine form and excellent quality.

Glen Mary. Large to very large, sometimes flattened; sweet and rich.



Nick Ohmer. A fine, fancy market berry and always superb for the table. A giant in size.

Senator Dunlap. Exceedingly vigorous. Fruit large, regular and attractive in form, deep red to the center. Firm in substance.

7m. Belt. Berries very large, conical, bright red; of good flavor. The plant is strong, healthy, very fruitful.

#### GRAPE VINES. ALL TWO-YEAR OLD SELECTED STOCK

This is one of the most satisfactory crops that can be grown, because it can be depended upon practically every year. Grape vines will grow almost anywhere, but they should be carefully cultivated and pruned.

#### BLACK OR PURPLE GRAPES

#### WHITE OR YELLOW GRAPES.

Niagara. Bunch and berries large light greenish white. slightly ambered......Each, 45c; per doz., \$4.50

Pocklington Bunch and berry very large; attractive, golden yellow color......Each, 45c; per doz., \$4.50. Varieties marked with a (\*) are best for arbors.

#### SUITABLE DISTANCES FOR PLANTING SMALL [FRUITS AND GRAPE VINES.

Blackberries, 5 to 7 feet. Currants, 3 to 4 feet. Gooseberries, 3 to 4 feet. Raspberrie Raspberries, black, 4 to 5 feet. Strawberries, 1 x 3 ½ feet. Strawberries in beds, 1 ½ x 1 ½ feet. Raspberries, red, 3 to 4 feet.

## Shade and Ornamental Trees FOR LAWN, STREET AND FOREST PLANTING

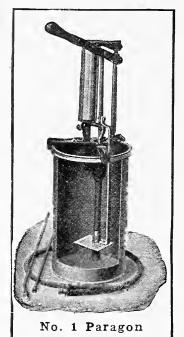
We enumerate below the principal varieties of Shade and Ornamental Trees, etc., all STRICTLY SELECTED STOCKS.

Each	Per		Each	$\operatorname{Per}_{\operatorname{Doz.}}$
\$1.50	\$15.00	OAK, Red 6 to 8 feet		\$37.50
1.50	15.00	Scarlet 4 to 5 feet	3.00	30.00
2.00	20.00	Pin 6 to 8 feet	3.75	37.50
1.50	15.00	POPLAR, Carolina10 to 12 feet	1.00	10.00
2.00	20.00	Bolleana 8 to 10 feet	1.00	10.00
		Lombardy 6 to 8 feet	.75	7.50
		SALISBURIA, Maiden Hair or		00.00
1.75	17.50		2.25	22.50
1.50	15.00	Willow	.75	7.50
2.25	22.50		1.00	10.00
1.50	15.00		1.00	10.00
2.25	22.50		2.00	20.00
2.00	20.00	WEEPING TREES.		
2.00	20.00	MULBERRY, TEAS WEEPING		
1.50	15.00			30.00
				20.00
	1	WILLOW, Babylonica 6 to 8 feet	1.00	10.00
	1.50 2.00 1.50 2.00 1.75 1.50 2.25 1.50 2.25 2.00 2.00	Each Doz. \$1.50 \$15.00 1.50 15.00 2.00 20.00 1.50 15.00 20.00 1.75 17.50 1.50 15.00 2.25 22.50 1.50 15.00 2.25 22.50 2.00 20.00 2.00 20.00	Each         Doz.           \$1.50         \$15.00         OAK, Red.         6 to 8 feet           2.00         20.00         Pin.         6 to 8 feet           1.50         15.00         POPLAR, Carolina.         10 to 12 feet           Bolleana.         8 to 10 feet           Lombardy.         6 to 8 feet           SALISBURIA, Maiden Hair or Ginkgo.         6 to 8 feet           SALIX CAPREA, Goat or Pussy Willow.         6 to 7 feet           SYCAMORE, American.         6 to 8 feet           European.         6 to 8 feet           TULIP TREE.         6 to 8 feet           WEEPING TREES.           MULBERRY, TEAS WEEPING	Each Doz. \$15.00 \$15.00 CAK, Red. 6 to 8 feet \$3.75 Scarlet. 4 to 5 feet 3.00 Pin. 6 to 8 feet 3.75 POPLAR, Carolina. 10 to 12 feet 1.00 Bolleana 8 to 10 feet 1.00 Lombardy 6 to 8 feet 7.75 SALISBURIA, Maiden Hair or Ginkgo. 6 to 8 feet 7.75 SALISBURIA, Maiden Hair or Ginkgo. 6 to 8 feet 7.75 SALISBURIA, Goat or Pussy Willow 6 to 7 feet 7.75 SYCAMORE, American 6 to 8 feet 1.00 European. 6 to 8 feet 1.00 European. 6 to 8 feet 1.00 TULIP TREE. 6 to 8 feet 1.00 TULIP TREE. 6 to 8 feet 1.00 WEEPING TREES. MULBERRY, TEAS WEEPING TREES. BIRCH, Cut-leaved. 6 to 8 feet 2.00 BIRCH, Cut-leaved. 6 to 8 feet 2.00

## Spraying Pumps and Appliances

PRAYING is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper Insecticide is applied through the medium of an up-to-date spray apparatus.

## PARAGON SPRAYERS



THESE Sprayers are strongly constructed and can be easily operated by one man. Our patented, self-cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred. The spray nozzle has only 32-inch outlet and spreads the liquid well. All parts of the machine are made of the best material obtainable.

The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed, to prevent breakage. The screen is of heavy perforated brass and will last many years. The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned. Suitable for spraying Insecticides and Fungicides on trees, shrubs and vines, as well as the application of Whitewash and Cold Water Paints.

#### Price List of Paragon Sprayers

No. 1. Capacity, 6 gallons. Equipment, 5 feet 6-ply hose, 5 feet spray pipe, two spray nozzles. Price.......\$15.00.

No. 3. Capacity, 12 gallons. Equipment, 10 feet 6-ply hose, 7 ½ feet spray pipe, two spray nozzles. Mounted on strong steel truck and can easily be wheeled to any desired place. Truck is easily detached when desired. Price....\$21.00.

No. 3. Machine without truck. Price, \$18.00.

No. 4. Capacity, 28 gallons. Equipment.

No. 4. Capacity, 28 gallons. Equipment, 20 feet 6-ply hose, 10 feet spray pipe, two spray nozzles. Mounted on two strong 30-inch wheels. Price. . . . . \$28.00.

No. 4. Machine without wheels. Price \$24.00.

No. 5. Capacity, 50 gallons. Equipment, 25 feet 6-ply hose, 10 feet spray pipe, one 3-way spray nozzle, one single spray nozzle. This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying. Price...\$35.00.

Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for additional 

Send for descriptive circular giving detailed information.



#### Bamboo Brass Lined Spray Poles

12-foot lengths......net price, **\$4.50** 10-foot lengths. 0-foot lengths . . . . . . . . . . . net price, 8-foot iron, wood-encased pipes . . . net price, 1.25

#### MYER'S SPRAY PUMPS

Myer's Little Giant Brass Spray Pump. Complete with 

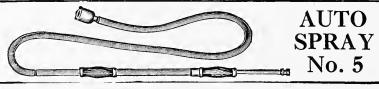
Myer's Improved Brass Barrel Spray Pump. Wit fifteen feet of one half-inch discharge hose and Vermor graduating nozzle......\$13.00.

Complete with one lead of fifteen feet discharge hose and graduating Vermorel nozzle......\$22.50.

Complete with two leads of fifteen feet each discharge hose and graduating Vermorel nozzles. \$25.00.

Four-foot Pipe Extension 50c Myer's Power Nozzle, 90c. Bordeaux Nozzle......90c Imperial Nozzle.....50c.

Vermorel Nozzle.........90c Sprinkling Nozzle...50c.



THE pump is made entirely of brass. It has two ball valves so arranged that they may be instantly cleaned. The threads are all cut, not rolled, so that there is no chance for leakage. Pump is double acting and will generate a pressure of 180 lbs.

We furnish with this pump  $3\frac{1}{2}$  ft. of  $\frac{3}{8}$  in. suction hose and a heavy strainer that keeps the hose from working out of a bucket or tank.

The extension is extra and is very useful for spraying field crops. The extension is curved so that the operator can direct the spray up or down while using the pump in a horizontal position. Extension can be used on any of the Auto-Sprayers.

Auto-Spray No. 5. Pump, hose, nozzle and strainer complete...... .....\$5.00. 

#### GOULD'S "BORDEAUX" HAND SPRAYER

#### AUTO COMPRESSED AIR SPRAY

Can be suspended from the shoulder, allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents. A practical machine for potatoes, tobacco, small fruits,

A practical machine for vineyards, poultry houses, green houses, etc. Extension pipes for spraying trees.

Auto Spray No. 1-B. Brass tank, with Auto-Pop Nozzle...\$10.00.

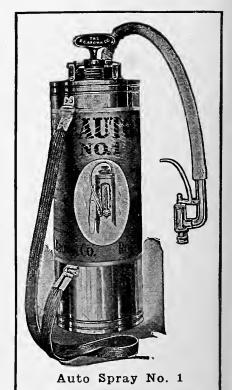
Auto Spray No. 1-D. Galvanized tank, with Auto Pop Nozzle, \$7.50.

Brass Extension. Two feet, per length...60c. Elbow......30c.

#### BRANDT EASY SPRAYER

compressed A compressed a 1 r sprayer made of Galvanized Steel. Holds one gallon. Is equipped with automatic shut-off nozzle and is found a very satisfactory sprayer where gardens are not too large. too large.
Price, each, \$2.50.

Send for descriptive circulars g ving detailed information.



Continued to next page

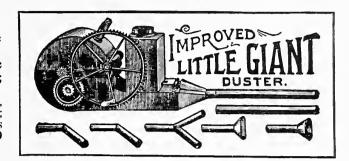
#### SPRAYERS, POWDER DUSTERS, Etc.—Continued

#### THE ROBERTSON COMPRESSED AIR SPRAYER

They give a continuous spray. By means of the universal nozzle the spray can be thrown on the under side of the leaves of plants and shrubs, the under side of beds and other furniture, into corners, behind doors, on top of mouldings, window casings, behind steam pipes, and other difficult places. Capacity, one quart. Tin Pump and Reservoir, each, 75c. Brass Pump and Reservoir, each, \$1.50.

ACME FOG ATOMIZER. Strong, durable and satisfactory. 

All Prices Subject to Market Changes.



#### AND FUNGICIDES INSECTICIDES

Liquid Insecticides and Poisons cannot be sent by mail.

Ant Eradicator. Useful against ants in lawns, gardens, etc. 8 oz. can, 25c.

Aphine. Kills plant lice of every species. This is a contact remedy. ¼ pt., 25c; ½ pt., 40c; pt., 65c; qt., \$1.00; gal., \$2.50.

ck Leaf 40. Soft-bodied, sucking insects may be effectively controlled by spraying with 'Black Leaf 40.' This is a contact remedy. 1 oz., bottle 25c; ½ lb. tin, \$1.00; 2 lb. tin, \$3.25; 10 lb. tin, \$13.75. Black Leaf 40.

ke's Liquid Fungicide. A powerful, reliable remedy for Leaf Spot, Leaf Rust, Scab, Mildew. Black and Brown Rot and most other Fungoid troubles. Per gallon, \$3.00 Zenke's Liquid Fungicide. gallon. \$3.00.
(Sufficient to make 50 gallons of solution.)

Fish Oil Soap. For destroying insects on Plants, Trees, Vines, etc. This is also a contact remedy. 1 lb., 25c; 5 lbs., \$1.10; in bulk, 25 lbs. or over, per lb., 16c.

pe Dust. A non-poisonous powder for the remedy and control of mildew and rot on Grapes, Goose-berries, Roses, etc. 1 lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75. Grape Dust.

Lime Sulphur Solution. For Fall, Winter and early Spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphis, Blister Mite, any Scale Insects or Bark Lice. 1 qt., 40c; ½ gal., 60c; 1 gal., 90c; 5 gals., \$3.00; ½ bbl., (25 gals.) \$8.50; 1 bbl, (50 gals.), \$15.00.

S. W. Dry Lime-Sulphur. Is a combination of Lime and Sulphur which can be used not only as a dormant spray but also as a summer spray in combination with Arsenate of Lead. I lb. can, 30c; 5 lb. can, \$1.25; 10 lb can, \$2.00; 25 lb. can, \$4.00.

Nico-Fume Liquid. For destroying Aphis, Thrip and Red Spider. Contains 40 per cent nicotine. This is a contact remedy. 1/4 lb., 65c; 1 lb., \$2.00; 4 lbs., \$7.50; 8 lbs., \$14.50.

with nicotine. Strips of paper strongly saturated with nicotine. These, when suspended and lighted, make one of the best and simplest methods of fumigating greenhouses. Price, air-tight cans, 24 sheets, \$1.25; 144 sheets, \$5.00; 288 sheets, \$9.50.

remedy (Liquid). Very effective against Plant Lice, Black and White Fly, Mealy Bugs, Scale Insects, Eggs and Larva. Zenke's Compound Plant Insecticide.

A very effective wash for Palms and Rubber Plants. 8 oz. can, 25c; per gallon, \$1.50. (One gallon is sufficient to make 20 to 35 gallons of solution.)

Zenke's New Plant Life (Liquid). It is a Plant Food containing in proper percentage All Elements essential to Plant Growth.

Mix one quart with 50 gallons of water and water plants sufficiently to saturate soil. Use about one quart to one square foot of soil.

It is immediately available to absorption by plants and saves time and labor. 8 oz. can, 25c; gallon, \$3.00. (One gallon is sufficient to make 200 gallons of solution.)

lecide. Used according to directions will kill every San Jose Scale that comes in contact with it. 1 qt., 65c; 1 gal., \$1.60; 5 gals., \$6.80; 10 gals., \$11.70; 30 gals., \$28.85; 50 gals., \$43.00. Scalecide.

Scale Destroyer, Target Brand. This preparation is a soluble, mineral oil, designed especially for destroying and preventing San Jose Scale. 1 qt., 60c; 1 gal., \$1.40; 5 gals., \$5.50; 30 gals., \$25.50; 50 gals., \$39.50.

Slug Shot. Very effectual in destroying Caterpillars, Currant. Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs. Rose Slugs, Rose Lice, etc. 1 lb., carton 20c; 5 lbs., 60c; 10 lbs., \$1.15.

Sulphur, Powdered. Used to prevent and cure mildew on plants. 1 lb., 10c; 2 lbs., 15c; 5 lbs., 35c; 10 lbs., **60c.** 

Sulpho-Tobacco Soap. Destroys Black and Green Aphis, Mealy Bug, Red Spider, etc., on Plants, Shrubs and Trees. This is a contact remedy. 3 oz., cake 10c; (by mail, 15c); 8 oz. cake, 20c; (by mail, 25c.)

acco Dust. A sure remedy for Green Fly, Aphis, Fleas, Beetles, etc. 1 lb., 10c; 5 lbs., 25c; 100 lbs., Tobacco Dust. \$2.50.

Tobacco Dust for Fumigating. 1 lb., 10c; 3 l 10 lbs., 60c; 25 lbs., \$1.25; 100 lbs., \$4.00.

Tobacco Stems. Used for fumigating plants to kill insects, and as a mulch for roses, asters, lettuce, etc. 1 lb., 5c; bale of about 125 lbs., \$2.00.

#### MOSS, PEAT, ETC.

Moss, Green Sheet. For hanging baskets, etc. Per bale, 40c; bundle of 5 bales, \$1.50.

Moss, Sphagnum. For packing plants and growing Orchids, etc. Per lb., 15c; per bale, \$2.50;

Peat, Jersey. Rotted. Per peck, 40c; per bu., \$1.50.

Potting Soil. This is a mixture especially prepared by us, and such as used at our green houses. It is suitable for all ordinary plants and bulbs. Peck, 35c; bushel, \$1.00; barrel, \$1.50.

#### PREPARED BULB FIBRE

Growing bulbs, such as Roman Hyacinths, Dutch Hyacinths, Tulips and Narcissus in special prepared fibre has proven a great success: we strongly recommend our customers to try a few of the various bulbs in this way. The bulbs are potted the same way as in ordinary soil, just showing their tops. Do not press the fibre tightly, otherwise the roots do not work freely. Once potted, they require hardly any attention, only care must be taken to keep the compost moist, but not too wet. Peck, 40c; bushel, \$1.50.

#### EDWARDS' LEGUME BACTERIA

To inoculate	30 pounds of seed	. \$0.Cl
To inoculate	60 pounds of seed	. 1.20
To inoculate	300 nounds of seed	5.00

In ordering, be sure to name crop to be inoculated.



## Flower Pots and Saucers

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well. No Charge for Packing.



		Flower	Pots	
Size		Ea.	Doz.	Per 100
2	inch.	\$0.02	\$0.20	\$1.50
$\frac{2\frac{1}{2}}{3}$	66		30	2.00
3	44	03	.35	2.50
3 1/2	"		.40	2.75
4	"	05	.50	3.50
4 5 6 7 8 9	64	06	.70	5.00
6	46		1.00	8.00
7	44		1.50	12.00
8	66		2.00	16.00
9	"		3.00	24.00
10	44		4.00	
12		<b>.7</b> 5	8.00	
14	44	1.50		
16	44	2.50		

#### Flower Pot Saucers

Size	Ea.	Doz.	Per 100
4 inch	. \$0.04	\$0.35	\$2.50
5 ''	05	.45	3.25
6 "	06	.60	4.25
7 "	07	.70	5.50
8 "	08	.90	
9 "	10	1.10	
10 "	15	1.50	
12 , "	20	2.00	

#### Azalea Flower Pots

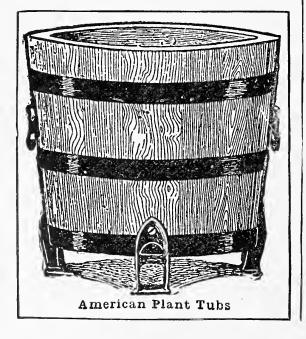
These are the same style as our standard Flower Pots, but not so deep. Suitable for Azaleas, Bulbs, Ferns, Spireas, etc.

Siz											Ea.	$\mathrm{Doz}_{ullet}$
5	inch	١.									\$0.06	\$0.70
6	6.4										.10	1.00
7	4.4										.15	1.50
8	4.6										.20	2.00
10	4.4			٠.							.40	4.00
12											.75	8.00

#### Round Seed Pans

These are the same style as our standard Pots, but not so deep, and are suitable for Cacti, Begonias, Tulips, etc.

Siz															Ea.	Doz.
5	inch														\$0.06	\$0.70
6	**														.10	1.00
7	4.														.15	1.50
_8	4 4								•						.20	2.00
10	81	•	•	•		•	ě	٠	٠	•		•				4.00
12	•	٠	٠	٠	•	•		•		•	•		•		.75	8.00

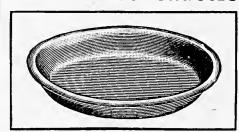


#### Fern Pans

These Pans are especially adapted for linings to porcelain and Silver Fern Pans.

Size									Ea.	Doz.
$5\frac{1}{2}$	inch								\$0.07	\$0.80
$\frac{6}{2}$	44				•					1.00
7		٠				•				1.25
<b>7</b> ½	••	٠	•	٠	•	•			.15	1.50

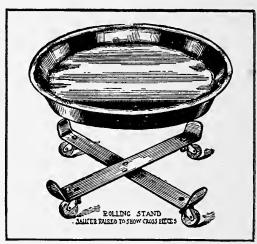
#### **Fibrotta** Flower Pot Saucers



Light and not readily broken, easy to clean and with a surface that will not scratch woodwork, as earthenware does, and they do not sweat through and mould.

Siz	е						Ea.	Doz.
5	inch						\$0.20	\$2.00
6	6.6						.21	2.10
7	44						.24	2.40
8	6.6						.25	2.50
10	* *						.28	2.75
12	6.6						.30	3.40
14	4 4						.40	4.50

#### **Fibrotta** Rolling Stands



The device consists of two steel pieces securely riveted and equipped with casters; a strong and compact support for plants, and can be readily rolled about from place to place without injuring the floor or carpet.

Inches	Casters	;										Each
12	4											\$0.80
14	4											.90
16	4											1.25
18	4											1.40
20	4											1.60
22	4		•		•							2.00

#### Maytree Moisture Proof Flower Pot Saucers

Siz	ze						Ea.	Doz.
5	inch						\$0.15	\$1.50
	44						.25	2.50
8	44						.30	3.00
9	"						.35	3.50
10	"						.50	5.00
11								5.50
$\bar{1}\bar{2}$							60	6.25



#### American Plant Tubs

An excellent tub, neat and durable. Made from 34 inch Cypress, with iron handles and feet, 3 iron hoops and 2 coats of green paint.

	_unic		-,					 ,		1	 	-			
No.	1-11 1/2	inches	diameter,	11 ½	inches	high	ι								\$1.40
No.	<b>2</b> —13 $\frac{1}{2}$	4.4	4.4	$11\frac{1}{4}$	4.4	" "									1.65
No.	3—14 ¾	4.4	* *	14	4.4	4.6									1.90
No.	4-16	4.6	4.4	15											2.25
No.	<b>5</b> —19		4.4	18	**										3.25
No.	<b>8</b> —26	**	6.6	23 3/4	4.6	٤.									6.00

#### Cedar Plant Tubs

Made of seasoned selected Virginia White Cedar, bound with steel hoops. Painted green, inside and out, and top edge finished with round bevel.
No feet.

Ñο.	<b>2</b> —Pail	Size.	10 ¾ inc	hes	diame	ter.	8	3/4	i	ac	h	es	h	ig	h.	 				\$0.60
No.	<b>5</b> —10 i:	nches	diameter,	9	inches	hig	h.													.85
No.	<b>7</b> —12	4.6	6.6	11	"	4.6														1.15
No.	9—14	"	6.6	13		"							. :							1.50
No.	<b>11</b> —16	6.6	4.6	15		4.6													٠.	1.75
No.	<b>12</b> —17	6.6	6.6	16	4.4	6.6														
No.	<b>14</b> —19	6.6	6.6	18	6.4															2.60

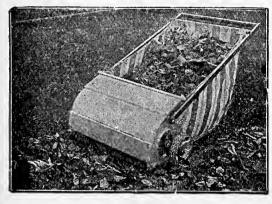
## Florticultural Gools and Sundries

CANES. Six to eight feet long, for plant stakes; per 100\$1.75 Extra strong, eight to twelve feet; per 100\$2.00  CANES. Japanese, green dyed, 3 feet long; per 100\$1.75  GLASS CUTTER, ECLIPSE. The best cheap cutter on the market. Each, 15c; per dozen\$1.50  GLAZING POINTS, PEERLESS. Will stop your glass from sliding, made of galvanized steel wire:  Per 1,000  No. 1. For small single-thick glass, 75c
No. 2. For large single-thick glass, 75c
No. 2½. For double-thick glass75c
GLAZING POINTS, ZINC CITY.  Effective on large or small glass; easy to drive, easy to extract.  Per lb
KNIVES, PRUNING, \$1.25 to \$2.00
·
KNIVES, BUDDING, \$1.00 to \$1.75
KNIVES, ASPARAGUS. American 40c
LABELS, WOOD. For pots, painted.
per 100 per 1000
$4 \times \frac{5}{8}$ -inch20c \$1.25
5 x ½-inch20c 1.60
$6 \times \frac{5}{8}$ -inch
8 x 7/8-inch
10 x ½-inch 70c 6.50
$12 \times 1 \frac{1}{8}$ -inch90c 8.00
<b>LABELS.</b> Tree, notched, c o p p e r wired; per 100, 25c; per 1,000, \$2.00

#### LAWN CLEANER PENNSYLVANIA

ABELS. Tree, copper, No. 1; per 100, \$1.50; No. 2, per 100, \$2.00

LABELS.



This machine will clean your lawn more thoroughly and quicker than three or four men can do it with hand rakes, and greatly benefit the turf.

In the Autumn it takes up the heaviest fall of leaves. It is made of metal, wood and canvas, and is put together in the most durable and thorough manner. Price.....\$20.00

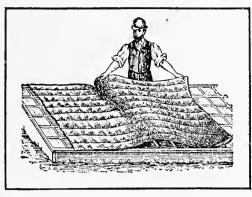
#### LAMP, DEFIANCE FUMIGATING.

(For use in greenhouses.)
It burns kerosene. Used by prominent Market Gardeners all over the country.

Each, 65c; per dozen, \$6.50.

ASTICA. For glazing green-houses.
One gallon will cover about 300 running feet (one side).
One gallon.....\$2.65

MASTICA GLAZING MACHINE. \$2.65



MATS,	нотве	<b>D</b> S	trong	Burlap.
	ructible inches			
10210	псцез	• • • •	• • • • • •	ψυ.υυ

MATTOCK, LONG CUTTER.	With
handle	. \$1.35

M A'T T	OCK,	CRONK'S	GAR-
DEN			75c

for glass, answering many uses equally well: PLANT BED CLOTH.

Light Grade, per yard......10c Medium Grade, per yard.....25c Heavy Grade, per yard......35c Write for special prices on large lots.

PRUNING KNIVES, TREE—Kansas Improved. Price.....\$3.00

PRUNING KNIVES, TREE — Happy

Thought. Price, 6 ft....\$1.50

8 ft.....\$1.75 10 ft.....\$2.00

PRUNING KNIVES, TREE—Detroit.

Price, 6 ft.....\$1.50 8 ft.....\$1.75

PRUNERS, LITTLE GIANT TREE. To use on a pole.

Price.....\$1.00 WATERS' TREE,

with Pole, 8 ft., 80c

PRUNING SHEARS, RED CLIPPER. No. 1......\$2.75

No. 2..... 2.50 PRUNING SHEARS, TIP-TOP.....75c

PRUNING SHEARS,

ORCHARD KING. Price.....\$3.00 PRUNING SHEARS, HAND California Pattern. 9-inch.....75c French. 8-inch......\$1.50 Wiss Heavy. Fine quality, 9 in. 2.75 Ladies' Hand...... 1.25 PUTTY, PEERLESS BLACK GLAZ-

ING. For glazing greenhouses. Remains flexible and pliable for years. Gallon.....\$1.75

GLAZING. For bedding glass in sash. One gallon will cover about 600 running feet (one side). Gallon.....\$3.00

PUTTY RULE

RAFFIA, NATURAL. The best tying material for plants, also used for making hats, baskets, etc.
Per lb., 60c; 5 lbs., \$2.50.

RAFFIA, COLORED. For making baskets and fancy work in following colors: Black, Brown, Orange, Pink, Red and Yellow. 1 oz., 10c; 1 lb., \$1.00.

**REEDS** (RATTAN). For basket making, etc.

No.	Oz.	1/4 lb.	lb.
1	\$0.15	\$0.55	\$2.00
3	15	.50	1.75
4	12	.45	1.50
5	10	.35	1.25

SASH, HOTBED, UNGLAZED.

Made from strictly clear cypress lumber. White lead used on the tendons, and iron dowel pins at the corners:

o. 1. 3x6 ft., three rows, 10-inch glass. Each, \$2.25; dozen, \$25.00 **No. 1.** 3x6

No. 2. 4x6 ft., five rows, 8-inch glass. Each, \$2.50; dozen, \$28.00.

**SAWS**, **PRUNING**. 16-inch....90c 18-inch.....\$1.00

SAWS, PRUNING. Double edge. \$1.00

SAWS, PRUNING, Disston....\$2.00 SEED SOWER, LITTLE GIANT.

For sowing wheat, oats, rye, flax, grass seed, clover seed, etc.; in fact any kind of seed broadcast. It ; in fact weighs but three pounds.....\$1.75

SPRINKLER, RUBBER, SCOL-LAY'S. Indispensable for floral work and window gardening. Large size.....\$1.25

THERMOMETERS.

Hotbed or Mushroom.....\$2.50

WATERING POTS, GALVANIZED. Made from best quality of iron, and heavily galvanized. Two roses with

each pot for fine and coarse watering. Long Spout, 4 quart, \$2.50; 6 quart,

\$2.75; S quart, \$3.00; 10 quart, \$3.50; 12 quart, \$3.75.

WAX, GRAFTING. 1/4 lb., 15c; 1/2 lb., 20c; 1 lb., 30c.

WIRE FOLDING PLANT STANDS.

The construction of the shelves or trays is such that there is more room for the pots and foliage than any other plant stand that takes the same amount of room on the floor.

3-Tray Wire Stand—Trays 7½ inches wide  $\times$  30 inches long.....\$3.75 2-Tray Wire Stand—Trays 7 1/2 inches wide x 30 inches long......\$2.75
1-Tray Wire Stand—Tray 10 inches wide x 24 inches long......\$1.75

WIRE WINDOW SHELF FOR PLANTS. Strong, compact, with adjustable steel brackets; can be applied to any window moulding on flat part of same. Brackets are constructed so as to allow for curtains between window and plants.

36-inch Shelf, by 7½ inches wide with Brackets complete..... \$1.25 42-inch Shelf, by 7½ inches wide, with Brackets complete.....\$1.50

Lack of space prevents us listing all the Horticultural Tools and Sundries we carry—but will be pleased to supply any equipment needed at current prices.

## Poultry Appliances and Supplies

#### PRAIRIE STATE SAND TRAY INCUBATORS

If you are in search of the best Incubator manufactured, the one that will hatch the largest number of strong, vigorous chicks, the Prairie State is the machine to buy.

THE Prairie State Incubator was first marketed in 1889, incorporating three essential principles in design which have been continued to the present day—top-radiant heat, down-draft ventilation, and applied moisture. They have been improved from time to time as experience has warranted, but in points of efficiency, economy, safety and service they have held unchanged the title through these years of national standard in incubator construction.

They are built of cypress—the wood everlasting—highly finished for attractive appearance, double-cased, positively insulated with high grade cotton and fitted with the best grade hardware on the market. Temperature regulation is automatic and sensitive, accomplished by zinc and steel toggle-joint thermostat. The heating and ventilating currents are in one, so that when heat is supplied ventilation is assured. These currents are furnished by an exclusive design heater, examined and approved under direction of Underwriters' Laboratories, Inc.

Every Prairie State is insurable. Moisture is constantly supplied by the famous patented Prairie State Sand Tray, insuring uniform evaporation at all times and uniform, relative humidity in the egg chamber.

Built in four sizes, ranging from 100 to 390 eggs. Egg Trays of light basswood and galvanized wire cloth. Nursery everything complete, ready to operate. Air distribution in all models is effected by the patented eddy-current distributor sheet at top of machine. The four diffusion machines have double bottoms with nursery; ventilation accomplished by the air diffusion method.

PRICE LIST OF PRAIRIE STATE SAND TRAY DIFFUSION LNCUBATORS

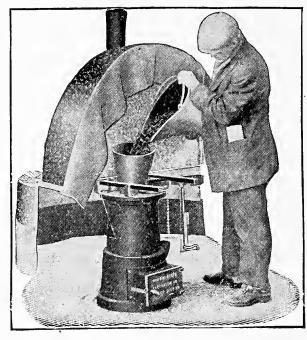
Standard Series No. 0, 100 eggs; 135 lbs. crated, price. \$31.00

Standard Series No. 1, 150 eggs, 160 lbs. crated, price. \$31.00

Standard Series No. 1, 150 eggs, 160 lbs. crated, price. \$31.00

Standard Series No. 3, 390 hen eggs; 325 lbs. crated, price. \$50.00

#### Prairie State Stove Brooders



HESE Stove Brooders are alike in all cast iron construction, solid base

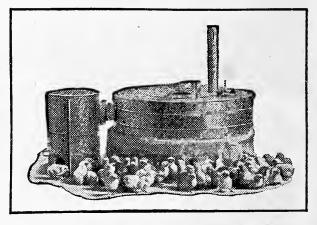
#### Prairie State Portable Hovers

No. 1. Capacity, 65 to 100 chicks, weight, crated, 50 lbs. \$12.00.

Prairie State Junior Portable Hover. Capacity, 50 to 75 chicks, weight, crated, 37 lbs...\$10.00.

#### Prairie State Universal Hovers

Universal Hover. With lamp case, smoke conductors, lamp, thermome-

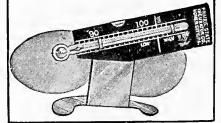


## Prairie State Incubator and

#### Brooder Thermometers

Incubator Thermometer Incline, with holder. Each, postpaid....\$1.00

Brooder Thermometer for Prairie State Brood-Each, postpaid 65c



#### Prairie State Combination **Outdoor Colony Brooders**

1. 3 feet wide, 6 feet long, two compartments, weight, crated, 300 lbs......\$22.00

2.  $2\frac{1}{2}$  feet wide. 5 feet long, two compartments, weight, crated, 208 lbs...... 18.00

Heat regulator attached to any of the above brooders, extra.....\$1.25

SEND FOR DESCRIPTIVE CATALOGUE OF PRAIRIE STATE APPLIANCES. Prices on all Poultry Feeds and Appliances Subject to Change Without Notice.

## THE HOME HATCHER WATER INCUBATOR

THE new "Home Hatcher" Incubator is the result of many years of experience in the field of incubation. This machine will take its place as the very best of its kind in its construction and lasting qualities, as well as in its ability to produce the largest percentage of good, healthy chicks at a minimum cost of operation. The case is of double wall construction, the inner wall being of composition board of especially high insulating value and the outer casing of cypress which has been chosen for its ability to withstand the most adverse conditions without deterioration, in preference to the cheaper redwood so commonly used in incubator construction, which because of its brittle nature will split where even the best care is taken.

The heating system is of copper throughout, the tubes being of eight ounce and the boiler of twelve ounce copper. The additional weight given the boiler is an added factor of safety inasmuch as it is at this point that the heating system receives the greatest abuse. Attention is directed to the fact that this is the most substantial hot water heating system offered in an incubator and will eliminate many of the complaints regarding leaky boilers. Construction throughout the entire machine is based on the same high regard for quality.

The "Home Hatcher" Incubator is manufactured in the two sizes most in demand by that trade to which it will particularly appeal. Sizes and prices are as follows:

125 egg size.....\$23.70 240 egg size......\$36.50

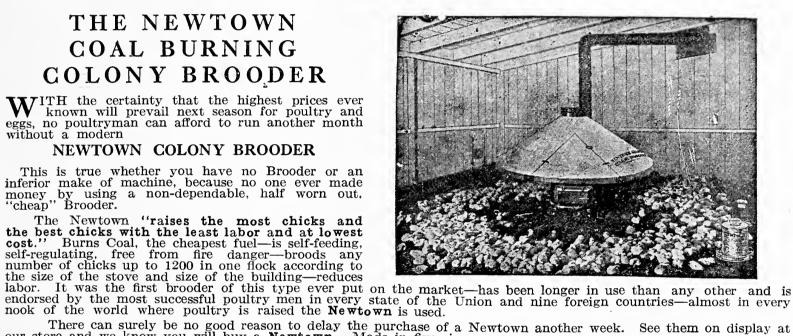
#### THE NEWTOWN COAL BURNING COLONY BROODER

WITH the certainty that the highest prices ever known will prevail next season for poultry and eggs, no poultryman can afford to run another month without a modern

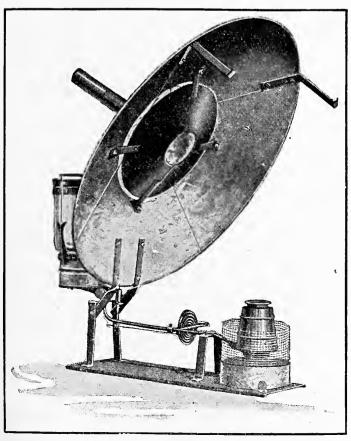
#### NEWTOWN COLONY BROODER

This is true whether you have no Brooder or an inferior make of machine, because no one ever made money by using a non-dependable, half worn out. "cheap" Brooder.

Ask for our Brooder Catalogue. It contains valuable information for every poultryman. It's free.



## The Newtown Oil-Burning Colony Brooder



FOR several years the coal-burning colony brooder has been generally recognized as the acme of brooding efficiency, and as a result of the inability to procure the proper grade of chestnut anthracite coal, probably the greatest problem of poultrymen was to find a substitute for the coal heated brooder.

of the big faults of oil-burning brooders has been their inability to produce and properly distribute over a large floor space sufficient quantity of heat to make possible the successful brooding of large flocks of chicks in cold weather.

The construction of the Newtown Oil-burning Colony Brooder is simplicity itself. It consists of the heater and deflector. The heater includes the blue flame wickless burner, automatic oil feeder, and oil fount all securely mounted on a heavy metal base, and the heat radiator which is bolted within the deflector.

Each brooder is shipped with everything complete in one crate, ready to operate. A thermometer and full instructions for operating are furnished with each brooder.

No	Diameter of Hover	Diameter of Heat Radiator	Price
18	36 inches	18 inches	\$18.00
25	52 inches	22 inches	<b>25.00</b>

CALL ON US FOR DETAILED PARTICULARS, OR SEND FOR COMPLETE CATALOGUE OF NEWTOWN GIANT BROODER STOVES, INCUBATORS, PORTABLE COLONY HOUSES, ETC.

Prices on all Poultry Feeds and Appliances Subject to Change Without Notice.

#### MANN'S GREEN BONE CUTTER

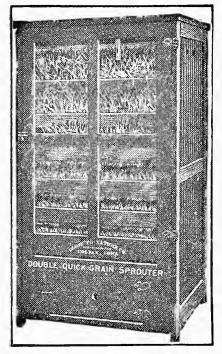
THE poultry raiser wants eggs, and wants them when eggs are worth the most. Green Bone and raw meat produce them. The hen will do her part if you give her a chance. The Mann's Bone Cutter gives you a better chance than does any other Bone Cutter.

No. 5-B. M. For flocks of 25 to 50 hens. Weight, 85 lbs. Price ....... 16.00 The No. 5-C, No. 5-B, and No. 5-B M, do not have the split hinged cylinder.

No. 7. For flocks of 75 to 150 hens. Weight, 107 lbs. Price............. 18.50 No. 71/2. Capacity, 50 to 100 lbs. per hour. Weight, 150 lbs. Price...... 25.00 No. 9. For flocks of 200 to 300 hens. Weight, 170 lbs. Price...... 28.50 No. 11. Capacity, 100 lbs. and upwards per hour. Weight, 215 lbs. Price. 40.00

No. 12. Capacity, 150 lbs. per hour. Weight, 260 lbs. Price...... 50.00 Every Hand-Power Mann Bone Cutter is warranted by us against breakage for one year, and we hereby agree to replace, free of charge, any breakage which occurs while cutting bone within one year from date of purchase, provided purchaser pays express charges on broken part. This insures the purchaser a first-class article.

Send for Free Descriptive Catalogue.



#### DOUBLE QUICK GRAIN SPROUTER

HE Perpetual Poultry Silo that grows Green Feed while you wait. Sprouts in 20 to 30 hours

and forces growths of an inch to two a day. Makes 2 to 6 bushels of green feed from one of dry grain. Many thousands of the Double Quick now in every part of the United States and Canada, and is in use in almost every civilized country in the world.

PRICES, CAPACITY, WEIGHT, SIZE

No. 2.  $\frac{1}{2}$  bushel, 4 trays, 50 to 75 hens, 18 x 14 x 30 inches, 35 pounds ..... 9.75 1 bushel, 5 trays, 100 to 150 hens, 21 x 17 x 40 inches, 55 pounds . . . . . . **15.09** No. 3.

2 bushels, 6 trays, 200 to 300 hens, 25 x 20 x 44 inches, 75 pounds..... 19.75

No. 5. 4 bushels, 12 trays, 400 to 600 hens, 39 x 25 x 45 inches, 125 pounds.... 29.60 No. 6. 8 bushels, 16 trays, 800 to 1,200 hens, 52 x 27 x 60 inches, 200 pounds . . 44.00 NOTE 1:—Capacities are given in dry grain.

NOTE 2:-Furnished with lamp, thermometer, directions, etc.

NOTE 3:-Largest sizes will pass through ordinary doors.

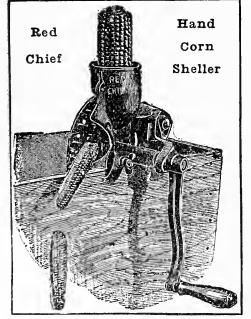
#### "RED CHIEF" Rapid Grinding Feed and Grist Mills

No. 1—Just the mill for small poultry raisers. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity ¾ to 1 bushel per hour. Price..\$4.00

No. 2—This is the best \$5.00 Mill made for grinding all kinds of grain. The feed can be regulated for very fine grinding. Clamps or bolts to box as desired. Has hooks on which to hang a bucket. Capacity 1 to 1½ bushels per hour. Price......\$5.00

5—This Mill also clamps or bolts to box and has hooks on which to hang a bucket. It is also equipped with fly wheel instead of crank which makes it run steady with least possible power. Capacity 2 to 4 bushels per hour. Price...........\$7.00

No. 12—Mounted on stand. We consider this the finest hand mill made. Steel axles, bronze boxes and a heavy fly wheel. Capacity 3 to 4 bushels per hour... Price, \$14.00.



- No. 15—For engine three-quarters horse-power or over. It has bronze boxes, steel axles, in fact all of the good features of the No. 20, except that it has no loose pulley and the capacity is not so great. It can be run with a crank when engine is not running. Capacity 5 to 8 bushels per hour. Price. \$14.00.
- No. 20—For grinding Corn Meal, Graham Flour, Stock Feed, etc., with a speed of 300 to 450 revolutions per minute, will grind 10 to 20 bushels of feed per hour. Power required 1½ to 2 horse-power engine. Patent tension for regulating size of ground material, making change of burrs unnecessary. Tight and loose pulley, 10 inches in diameter, 2½ inch face. Reversible belt shift. Feed Regulator. All bearings, bronze bearing metal. Weight, crated, 100 lbs. Price.......\$19.50. Stand, extra, \$3.50. Separator, extra, \$6.00.

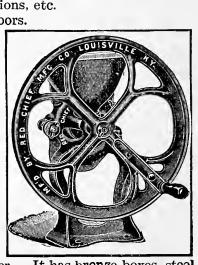
#### "RED CHIEF" Hand Corn Sheller

Is guaranteed to do as good, if not better work than any other Sheller on the market. Has patent oval-shaped teeth, shelling the corn without cracking the grains. Only sheller safe to use for shelling seed corn. Shells clean, taking off less chaff than any other sheller. Throws the cobs outside every time.

Clamps on barrel or tub as well as on box. Malleable Iron Crank screws on. Requires no wrench. Tension directly on cob, not on hopper, which makes sheller run easy, no force being required to expand the hopper. Price...........\$2.50.

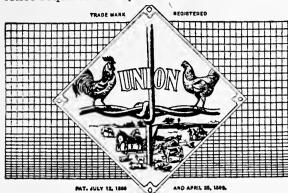
Pop Corn Attachment, for shelling Pop Corn, 40c extra. Red Chief Box Seed Corn Sheller. Price......\$7.50.

Prices on all Poultry Feeds and Appliances Subject to Change Without Notice.



#### UNION LOCK Poultry Fencing

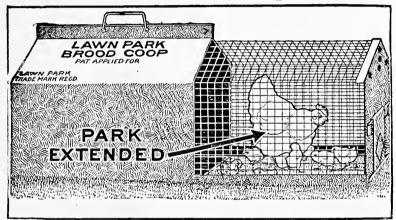
S all of the cables are the same length, and run the whole A Sall of the cables are the same length, and run the whole length of the fabric, every part can be stretched perfectly. Because of its strength and construction this fence requires no top or bottom rail and no more posts than the ordinary woven stock



woven stock fence, or about one-half the n u m b e r needed in ordinary poul-try netting. Union Fence especially adapted for use where a light, attractive and neat a p p e a r i n g fence is required.

12-inch, bale of 10 rods \$2.00 | 36-inch, bale of 10 rods \$3.75 | 18-inch, bale of 10 rods 2.50 | 48-inch, bale of 10 rods 4.50 | 24-inch, bale of 10 rods 3.25 | 60-inch, bale of 10 rods 5.00 | 72-inch, bale of 10 rods...\$5.50.

#### Lawn Park Coop



#### Lightning Lice Killing Machine

No. 1 Machine, suitable for young chicks or pigeons. \$3.50.

No. 3 Machine, suitable for

chickens of the Mediterranean class and birds, such as Turkeys, Cochins and Brahmas. This size is not suitable for young chicks or pigeons......\$5.50. FREE

Charles Schild, Cleveland

With each machine one-half pound of special Lice Powder for use in the machine is given free.

#### Egg Boxes

Eyrie. 15 egg size, each, 25c; 30 egg size, each, 35c. Paper Carton. 1 dozen size, per dozen, 15c; per 100, \$1.00.

Continental Safety Carton. 1 dozen size, per dozen, 20c; per 100, \$1.25.

#### Egg Carriers

Humpty Dumpty. 6 dozen size. each, 50c; 9 dozen size. each, 55c; 12 dozen size. each, 60c; 30 dozen size. each. \$1.00.

Moe's Regal. No. 14—15 eggs, each, 20c; No. 15—30 eggs, each, 30c; No. 16—50 eggs, each, 60c; No. 17—100 eggs, each, \$1.00.

#### Egg Cabinets

Wood's Revolving. 150 egg size, \$3.50; 288 egg size. Wood's Pony Cabinet. 72 egg size, each, \$1.00.

## Incubator and Brooder Lamps,

Burners and Wicks
Incubator Lamps.
Incubator Lamps.
Sizes of Colony
Incubator Lamps.
No. 2 for No. 1 Incubator and all Brooders and Universal Hover, 75c.
Incubator Lamps.
No. 3 for No. 2 and No. 3 Incubators,

85c.
Lamp Burners. Sun Hinge Burner, No. 1, using ½-in. wick, 50c; No. 2, using 1-in. wick, 60c; No. 3, using 1½-in. wick, 75c.
Lamp Wicks. No. 1 and No. 2 Wicks, dozen, 20c; No. 3 Wicks, dozen, 30c.

Leg Bands

Moe's Key Ring. (Celluloid). For American and Mediterranean Breeds. 10 colors—black, white, dark blue, pink, light blue, red, garnet, green, yellow, purple. Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.

Pigeon and Baby Chick Sizes. (Celluloid). Per dozen, 10c; 25 for 20c; 50 for 35c; 100 for 50c.

Smith Double Clinch. (Aluminum). Per dozen, 15c; 25 for 30c; 50 for 50c; 100 for 75c.

Leader Adjustable. (Aluminum). No. 1—For Bantams and Leghorns. No. 2—For all larger breeds and Turkeys. Per dozen, 15c; 25 for 30c; 50 for 50c. 100 for 75c.

Moe's Self Locking. (Metal). Per dozen, 15c; 25 for 30c. 50 for 50c; 100 for 75c.

Double Clinch. (Aluminum). For Pigeons. Per doz., 15c; 25 for 30c; 50 for 50c; 100 for 75c.

Nest Eggs

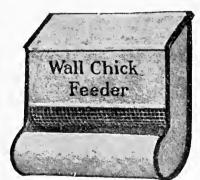
Lice Expelling. Each, 5c; per dozen, 50c. Porcelain. 3 for 10c; per dozen, 30c. Lime. 3 for 10c; per dozen, 30c.

Nests, Poultry and Pigeon
Wire, Hen. Each, 15c; per dozen, \$1.50.
Clay, Pigeon. 8-inch, each, 10c; per dozen, \$1.00.
Indurated Fibre, Pigeon. Each, 30c; per dozen, \$3.00.

Roofing Papers Rex Flintkote Roofing.  $\frac{1}{2}$  ply, \$2.25; 1 ply, \$2.50; 2 ply, \$3.50; 3 ply, \$4.50; all per square of 108 square

Tin Roofing Caps. Per lb., 10c.
Roofing Nails. Per lb., 8c.
Rex Roof Paint. Per gallon, \$1.00.
Flintkote Plastic. 1 qt., 40c; 1 gallon, \$1.25.

#### Feeding Devices For Poultry



#### Moe's Round Baby Chick Feeder

The most convenient and commodious feeder on the market. Can also be used for water. Manufactured

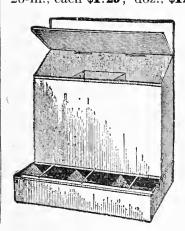
in two sizes.

No. 11, small size, each 20c.
No. 12, large size, each. 35c.



#### Wall Chick Feeder

screen keeps top prevents roosting. 10-in., each, 75c; doz., \$7.50. 20-in., each \$1.25; doz., \$12.50.



#### Poultry Feeder, 1 - 2 - 3

For dry mash, scraps, shells, grit, charcoal or any poultry feed. When used for one kind of feed only, take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders.

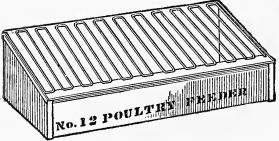
Price. Each \$1.45 Price..... Each, \$1.45.

Prices on all Poultry Feeds and Appliances subject to change without notice.

#### Feeding Devices for Poultry—Con't. Atsatt's Feeders



Equally good for water or food. Comfort for the poultry, is very little trouble. Com-No expense and no



#### Felker's Wall **Feeders**

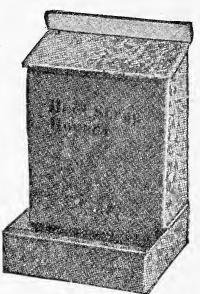
Practical dry mash feeders, designed to on the hang wall.

No. 12 Feeder, 12 inches long.....each, 50c; doz., \$3.00. No. 24 Feeder, 24 inches long.....each, 80c; doz., 8.00.



Grit and State Prairie Shell Box. Made of heavy galvanized iron, with 3 compartments.

Each, 75c; doz., \$7.50



Prairie State Beef Scrap and Dry Food Hopper. Capacity, 10 pounds scrap. Each, 75c; doz., \$7.50.



#### **Favorite** Dry Mash Hopper

The wire grid is raised or lowered as required for coarse or fine mash. The flange at the edge prevents any possibility of waste, and the small wires extending from the flange to the wire grid prevents the birds from throwing the feed sidewise out of the hopper.



Price 12-in.	12-at	 Each,	\$1.50.
Price, 18-in.,	18-qt	 Eacn,	2.00.
Drice 94 in	24 at	Each	2.50.

#### MOE'S GRIT AND SHELL BOXES



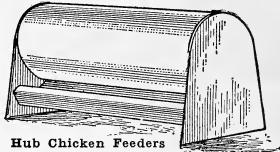
Moe's Grit Box; capacity about 1/8 bushel....\$1.00. No. 90. Four compartments . . . \$1.25 partments....45c No. 45.



#### **Hub Chicken Feeders**

Keeps feed clean and dry. Chickens can not get into it, and can not waste the feed.

9-in.Feeder. Each, 50c. 15-in. Feed-er, each, **75c.** 



#### Moe's Round Feed Saving Hopper



#### Patent Pending

Made round so that it will accommodate more birds at one time.

Moe's Round Hopper, 1 bu. capacity......\$1.50. No. 7. Moe's Round Hopper, ½ bu. capacity..... 1.00.

#### Moe's Feeder and Exerciser



The exercise afforded by using this device keeps your hens in prime laying condition at all times. Manufactured in three sizes:

\*No. 51. For low coops (see footnote) . . . . . . . . . . . \$1.35. No. 52. 8-qt. capacity. 1.65. No. 54. 1-bu. capacity. 2.75. \*This Feeder has a bracket

for attaching to side walls.

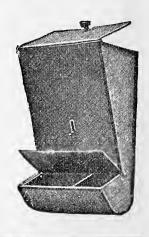
#### Round Bottom Dry Food Hopper

Dry mash and beef scrap feed readily and never clog. Price.....each, 90c.



These chick servers give out pure food and water at all times until the supply is consumed.

Price.....each, 25c; doz., \$2.50



#### EVER CLOGAND WASTE PROOF HOPPER DAISE Patent Pending



This hopper does away with all trouble of feed clogging, no matter how coarse. Manufactured in 3



No. 35. 12-quart capacity...... 18-quart capacity..... 1.75. No. 36. No. 37. 36-quart capacity.....

#### DRINKING FOUNTAINS FOR POULTRY AND PIGEONS

#### McCullough's Sanitary Glass Chick Fountain

FOUNDED 1838

Best Fountain made for Chicks.

Each, 15c; 6 for 90c; Per dozen, \$1.75.

#### McCullough's Wall Fountain

This fountain is especially servicable for chicks.

Each, 25c; per doz., \$2.50.



## ANITARY POULTRY DRINKING FOUNTAIN

#### Patented

Dead air space be-tween cover and reservoir keeps water cool in summer and from freezing in winter. Sanitary and humane. Manufactured in three sizes: and



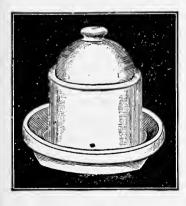
No. 1.	One-gallon capacity	. \$1.90.
No. 2.	Two-gallon capacity	. 2.75.
No. 4.	Four-gallon capacity	. 3.50.

#### Peerless Drinking Fountain

Easy to clean and fill and fowls can not injure their combs when drinking. Simple in construction, durable and practical.

Brooder size......Each, \$0.50.





#### Sanitary Stoneware Fountain

The top is removable, allowing the fount to be thoroughly cleaned inside. The proper thing to use where medicine is given in the drinking water.

1-qt....Each, 40c; doz., \$4.25.

2-qt....Each, 50c; doz., 5.00.

4-qt....Each, 60c; doz., 6.25.

#### McCullough's Galvanized Drinking **Fountains**

Cone Top



ESTABLISHED

81 YEARS

These fountains are light, nonbreakable and easily cleaned. 

#### Moe's Fountain or Feeder to Fit Mason Jars

It will fit pint, quart or one-half gallon Mason jar.

Convenient, cheap and sani-Convenient, cheap and sanitary. Can be used for feed as well as water for little chicks. Manufactured in one size only, 6 inches in diameter. Ea., 10c; 2 for 15c; 4 for 25c.



#### Drop-Bottom Fount

#### **Drop-Bottom Fount**

28-gauge galvanized steel.

Easiest thing in the world to open and clean. Clasp by which the bottom is fastened fits over the small hole under the hood, preventing slopping of water when the fount is handled. Solid brass hinge rod—no rust.

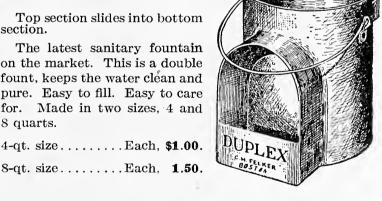
2-qtEach,	\$0.50.
1-galEach,	.90.
2-galEach,	1.10.

#### The Duplex Fountain

Top section slides into bottom section.  $\,$ 

The latest sanitary fountain on the market. This is a double fount, keeps the water clean and pure. Easy to fill. Easy to care for. Made in two sizes, 4 and 8 quarts.

4-qt. size.......Each, \$1.00.



#### MILKOLINE FOR POULTRY AND HOGS

ILKOLINE is pure, modified buttermilk in condensed MILKOLINE is pure, mounted section and acids have form, to which vegetable fats, protein and acids have been added, so that it will keep indefinitely in any climate and will not mould, rot or sour. It is much more satisfactory than buttermilk because buttermilk is often of uncertain quality, due to the variation in the ripening of cream, while Milkoline is of an even, uniform acidity. Milkoline will make more pork per bushel of grain, because your hogs assimilate their food the natural way, thereby getting more nourishment from what they eat. Milkoline gives them the appetite—they eat more—grow faster. This means higher profits for you.

All poultry raisers know that milk is almost indispensable in the first two weeks of the baby chick's life. Milk means more rapid growth, less mortality and stronger, healthier chicks than any other food can produce. Poultry raisers rarely ever have sufficient milk to feed their chickens and for this reason we would like to introduce Milkoline. Milkoline Mixture cheapens the cost of production on account of its ability to make the digestive organs of the fowls assimilate all the nutriment of the food. When fed to laying hens it largely increases the egg yield.

Send for descriptive booklet giving complete information. Being assured of its value, we are offering Milkoline at

the following prices:
<b>55</b> gallon barrels <b>\$0.95</b> per gallon
40 gallon barrels <b>1.00</b> per gallon
32 gallon half barrels 1.00 per gallon
10 gallon kegs 1.25 per gallon
5 gallon kegs <b>1.50</b> per gallon
1 gallon bottles 2.00 per gallon

Prices on all Poultry Feeds and Appliances subject to change without notice.

#### Made from \(^3\)\%-inch White Pine Lumber. Stained with Green Creosote Shingle Stain. CHICAGO BIRD HOUSES

Wren Houses

Wren Houses

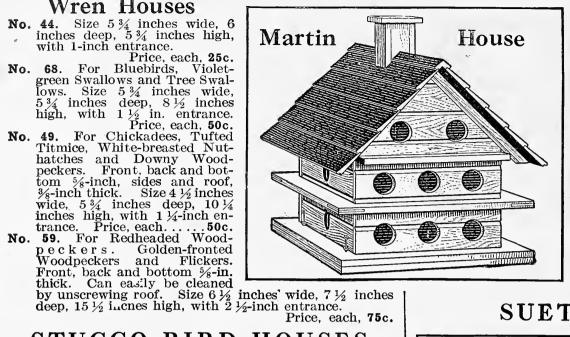
No. 44. Size 5 ¾ inches wide, 6 inches deep, 5 ¾ inches high, with 1-inch entrance.

Price, each, 25c.

No. 68. For Bluebirds, Violet-green Swallows and Tree Swallows. Size 5 ¾ inches wide, 5 ¾ inches deep, 8 ½ inches high, with 1 ½ in. entrance.

Price, each, 50c.

No. 49. For Chickadees, Tufted Titmice, White-breasted Nuthatches and Downy Woodpeckers. Front, back and bottom ⅓-inch, sides and roof, ⅓-inch thick. Size 4 ½ inches wide, 5 ¾ inches deep, 10 ¼



#### Martin Houses

Made from clear White Pine oer. Painted two coats white, green roof and brick red lumber. chimney.

No. 6. Has six apartments. Size 20 inches wide, 22 inches deep, 15 ½ inches high, with 2 ½-inch entrance. Price, each. .\$5.00

No. 10. Has ten apartments. Size 20 inches wide, 22 inches deep, 22 ½ inches high, with 2 ½-in. entrance. Price, each. . \$7.00

No. 16. Has sixteen apartments. Size 24 inches wide, 30 inches deep, 21 inches high, with 2½ inch entrance.

Price, each, \$12.50

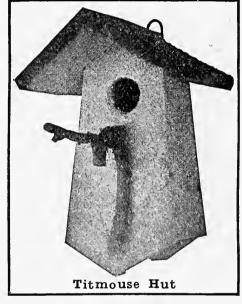
20. Has twenty apartments. Size 24 inches wide, 30 inches deep, 25 inches high, with 2½-inch entrance.
Price, each, \$15.00. No. 20.

#### STUCCO BIRD HOUSES

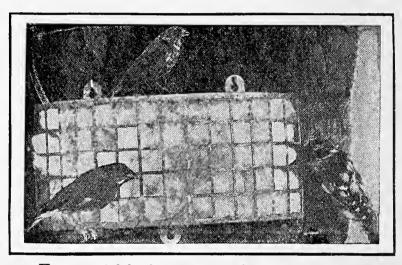
OUR model hut-lets and cabins which we pro-vide are appreciated by all bird lovers.

## PRICE LIST HUTS AND CABINS

Each Wren Hutlet .\$1.50 Bluebird Hut.. 1.75 Titmouse.... 1.50 Bark Hut.... 3.00 Chickadee Hut 1.50 Woodpecker and
Flicker Hut. 1.75
Martin Houses
\$5.00 to \$50.00
Feederies, Large,
\$15.00 to \$35.00
Feederies, Small, Feederies, Small, \$1.50 to \$2.00 Carved and Hewn Hut \$5.00 to \$25.00 Squirrel Cabins, \$4.00 to \$10.00.



#### SUET BASKETS

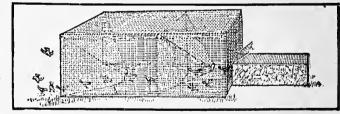


Has a metal back, curved to fit a tree trunk or post that protects the tree from injury. Suet or beef trimmings is the best packing. Place the basket on the shady side in Summer, and the sunny side in Winter. Weight, 2 lbs. Price, each, 75c; postage extra.

The Dodson Improved Sparrow Trap

The Dodson Sparrow Trap is made of tinned wire, electrically welded, strong and durable—will last for years. It has sharp, adjustable needle points projecting from the mouth of each of the two funnels, which effectively prevent any sparrows from getting out of either the front or second enclosure. Size 36 x 18 x 12 inches.

Price, complete with receiving box.....



#### PURE SEEDS FOR BIRDS

Canary Seed, recleaned	. 25c	per	lb.
Rape Seed, recleaned	. 20c	per	lb.
Hemp Seed, recleaned	. 15c	per	lb.
Sunflower Seed, recleaned	. 20c	per	lb.
Millet Seed, recleaned	. 15c	per	lb.
Lettuce Seed, recleaned	. 20c	per	lb.
Cuttle Bone	$\mathbf{per}$	lb.,	90c
Bird GravelP	acka	ge,	15c

Postage must be added if wanted by mail. See Postal Rates, second page of cover.

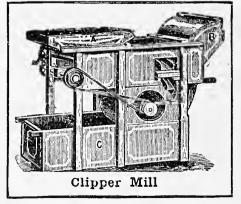
#### MUSTARD FOR POULTRY

For many years poultry fanciers have striven for increased egg production alone, with a consequent showing by actual tests of a loss in degree of stamina and of fertility. The use of mustard has shown an actual increase in both stamina and fertility.

A teaspoonful for every six hens, mixed with the wet or dry mash, should be fed each morning. In this way

one fowl will consume one-half pound of mustard in about six months. Send for booklet.

1 ½ lbs., 55c; 3 lbs., \$1.00; 5 lbs., \$1.65; 10 lbs., \$3.25; 25 lbs., \$7.80.



#### Clipper Seed and Grain Mills

These mills are especially adapted for cleaning Grain, Clover and Timothy Seed. Descriptive circulars and prices for Hand and Power Mills sent on application.

Lack of space prevents us describing the numerous POULTRY APPLIANCES and SUPPLIES we handle. We, however, shall be pleased to quote prices on any sort of equipment desired, also on a full line of Feeds for POULTRY, PIGEONS and BIRDS.

## THE J. M. McCullough's Sons Co.

SEED MERCHANTS,

No. 316 WALNUT STREET,

. 0. BOX 845

CINCINNATI, OHIO.



## Bean Power Spraying Outfits

THE accompanying illustration presents a view of the Bean Power Sprayer. These sprayers are made in several sizes to meet all the requirements of orchardists, whether orchards are large or small. They have proved to be economical, laborsaving and more thorough in applying insecticide than any other device on the market.

"WHY the

#### BEAN

is the BEST"

FIRST—The Bean Pressure Regulator maintains a uniform pressure; saves

fuel and wear of engine; is safe and dependable; makes possible the removal of any valve in the pump while full pressure is maintained on the air chamber, and while engine is operating.

SECOND—The Bean Threadless Ball Valves (Reversible and Interchangeable Seats) may be removed without stopping engine; no threads; saves time; valves easily cleaned.

THIRD—Porcelain lined Cylinders, guaranteed to last the life of the pump.

FOURTH—Underneath suction; tanks easily emptied; engine throws more liquid with less power.

FIFTH—Only pump without stuffing box—This saves labor and trouble.

SIXTH-Bean Eccentrics increase the life of the pump and the durability of the outfit.

SEVENTH—One piece steel bedplate—makes outfit rigid, durable and light.

EIGHTH—The Bean rocking bolster; special truck reduces weight of outfit; adjustable on all kinds of ground.

NINTH—Novo Engine; simple to operate; runs under all conditions; may be removed from outfit and used for other purposes.

TENTH—Bean refiller; saves time and labor; simple to operate; one man can fill the spray tank in 5 minutes Besides these features the Bean equipment has many other strong points which the fruit growers should consider before purchasing an outfit.

Descriptive catalogue giving detailed information, mailed upon request.

Nu-Rex Form Arsenate of Lead. Rex Bordeaux Mixture. Rex Lime and Sulphur. Send for descriptive circulars giving full information.

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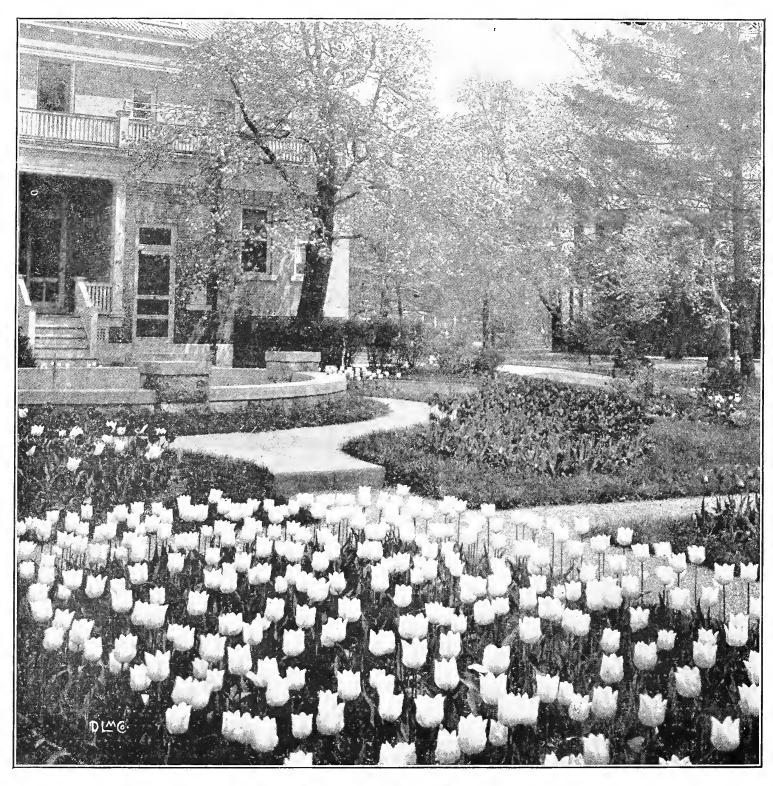
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# McCULLOUGH'S Catalogue -of-Bulbs and Seeds

FALL I-9-1-9





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